The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 833.---Vol. XXI.] LONDON, SATURDAY, AUGUST 9, 1851. [Price 6d.

BUDNICK CONSOLS MINE MATERIALS FOR SALE.

MR. TIPPET has been instructed to SELL, BY PUBLIC AUCTION, on Monday, the 18th day of August inst., at Ten o'clock in the forenoon, at Budnick Consols Mine, in the parish of PERRANZABULOE, the excellent and

VALUABLE MATERIALS THEREON—VIZ.:

1 50-inch cylinder STEAM-ENGINE, with two boilers, about 18 tons.
1 18 inch cylinder STEAM-WHIM, with boiler, about 7 tons.

Capstan and shears	2 14-inch H-pieces
Capstan Rope	2 12-inch ditto
Balance-bob	1 10-inch ditto
1 15-inch pump	1 5-inch ditto
9 14-inch ditto	2 14-inch windbores
7 13-inch ditto	2 12-inch ditto
7 12-inch ditto	1 11-inch ditto
6 11-inch ditto	1 9-inch ditto
6 10-inch ditto	3 7-inch ditto
3 9-inch ditto	1 5-inch ditto
8 8-inch ditto	3 14 inch matching-pieces
1 7-inch ditto	1 13-inch ditto
1 6-inch ditto	1 11-inch ditto
2 15-inch working barrels	1 8-inch ditto
7 14-inch ditto	2 14-inch plunger-poles, with stuffing-boxes and glands to match
2 13-inch ditto	1 13-inch ditto ditto
2 12-inch ditto	1 12-inch ditto ditto
1 10-inch ditto	1 8 inch ditto ditto
3 9-inch ditto	1 4-inch ditto ditto
1 8-inch ditto	1 8-inch ditto pole-case
2 14 inch doorpieces	1 11-inch stuffing-box and gland
1 13-inch ditto	150 fathoms 9-16-inch whim chain
1 12-inch ditto	70 fathoms 12-inch rods
1 11-inch ditto	Connecting ditto for balance-bob
1 8-inch ditto	Wood bucket ditto
4 7-inch ditto	Bucket caps
1 4-inch ditto	

Prongs and brasses, 22 pairs rod plates, caps for balance-bob, capstan, pulleys, yokes, staples and glands, rod-bolts, pump-rings, tram-iron, tram-waggons, winches, iron blocks, iron bucket-rods, old chain, iron valves, bolts and burs, spanners, beam, scales and weights, 2 cisterns, ladders, pulley-stands and palleys, launders, water-barrels, barrows, 1 barrel tar, 6 ditto antifriction grease, 1 ditto refined tallow, 2 engine counters red, white, and sheet-lead, desk, leather, candle chest, oil can, white yarn, engine shag, dressing tools, turning lathe, sheds, oak axle, a quantity of timber, about 30 tons of prime coals, and miscellaneous articles.

The materials are in excellent condition; may be viewed on application to the agents at the mine; and all further particulars had at the office of Mr. Tippet, Lemon-street, Truro.—Truro, August 2, 1851.

TO ENGINEERS, MANUFACTURERS, AND OTHERS.

MESSRS. FULLER & HORSEY will SELL, BY PUBLIC AUCTION, on Friday, the 22d August, at Twelve o'clock, at the Upper Ordnance Wharf, ROTHERHITHE, in lots,

TWO STEAM-ENGINES,

of 50-horse and 4-horse power; that of 50-horse power, a highly-finished condensing STEAM BEAM ENGINE, by Maudslay, Sons, and Field, made in 1845, regardless of cost, for the Atmospheric Railway Company; D slide valve, 40-inch cylinder, 4-ft. stroke, air-pump, bright connecting-rod, fly-wheel, and first driving motion; cylindrical steam-boiler, 36-feet long, 6 ft. 6 in. diameter, with internal fire-place and flue, fitted by the same eminent makers. A 4-horse power high-pressure TABLE STEAM-ENGINE, with egg-end boiler, fan-blast, with flue, leather straps; the fire-brick erection of furnaces, 5000 new fire-bricks, portable forge, corrugated iron beam to 100 feet new steam-pipe, 10 tons anthracite coals, 5 chaldrons coke, 3 tons spelter, the furniture of the board-room, counting-house fittings, and other effects.

To be viewed the morning of sale, or previously by special order, which, with catalogues, may be had of Messrs. Fuller and Horsey, 13, Billiter-street, London; catalogues may also be had of Messrs. Barlow, Payne, and Parker, 2, Bennett's-hill, Birmingham, and No. 1, Cross-street, Manchester.

VALUABLE MINING MATERIALS FOR SALE.

MR. PRYOR has received instructions to SELL, BY PUBLIC AUCTION, on Monday, the 25th August next, all the valuable

STOCK OF MATERIALS AT WHEAL MARY,

in the parish of REDRUTH, CORNWALL—Comprising

1 70-inch cylinder ENGINE, with two BOILERS—complete.
1 WINDING MACHINE, and crusher attached, with BOILER, &c.

Capstan and shears	2 11-inch working barrels
Capstan rope	2 16-inch plunger poles
52 9-feet 16-inch pumps	1 8-inch ditto
22 9-feet 11-inch ditto	2 16-inch windbores
14 9-feet 14-inch ditto	2 11-inch ditto
12 9-feet 13-inch ditto	3 14-inch ditto
9 9-feet 8-inch ditto	2 16-inch stuffing-boxes and glands
2 16-inch H-pieces	1 12-inch ditto ditto
2 16-inch top-doorpieces	Large quantity of iron bucket prongs
1 12-inch H and top-doorpieces	New and old timber; new and old iron
2 11-inch clack-seatpieces	200 fathoms tramroad iron
3 14-inch ditto	Junk, and with various other articles
3 14-inch working barrels	necessary for mining purposes.

The Sale to commence at Ten o'clock a.m.

Mining Offices, Town Hall, Redruth, Cornwall, July 30, 1851.

LEAD MINES IN SCOTLAND.—TO BE LET, for such period as may be agreed upon, the LEAD MINES of KNOCKIBED, in the county of WIGTOWN, belonging to the Earl of Stair. These mines were successfully worked by the proprietor many years ago, and are well situated for water-power and cheap labour, and near to a shipping port. A number of lead mines are now successfully and extensively worked in the adjoining county of Kirkcudbright. As there appear to be numerous veins which might be wrought most economically by a drift from an adjoining river, this undertaking would be deserving the attention of a company of capital and enterprise.

Apply to G. Guthrie, Rephad, by Stranraer.

WALL'S-END COLLIERY.—TO BE LET, and entered upon on or after the 28th day of September next, for such a term of years as may be agreed upon, all that CURRENT-GOING COLLIERY, well-known by the name of WALL'S-END COLLIERY, at present held by Messrs. Archbold and partners, under lease from the Dean and Chapter of Durham, comprising the COAL MINES under the whole of the lands belonging to the said Dean and Chapter, in the township of WALL'S-END, in the county of NORTHUMBERLAND.

The Low Main Seam, which has been sunk to at a depth of 22 fathoms below the Bensham Seam, and the Beaumont Seam, which has been bored to at a further depth of 23 fathoms, remain untouched throughout the Royalty. The Low Main Seam, in the royalty next adjoining, is of good quality, and is worked for gas purposes.

The Bensham Seam supplies the vend of the existing colliery. The colliery is contiguous to, and has shipping berths on, the River Tyne.

Plans of the workings of the colliery, and further particulars, may be known on application to Mr. E. F. Boyd, Urpeth Colliery, near Chester-le-street; or at the offices of the Registrar of the Dean and Chapter of Durham, 28, South Bailey, Durham.

Durham, July 2, 1851.

CHESHIRE COLLIERY.

TO BE LET, ON LEASE, the PARKGATE COLLIERY, near PARKGATE, in the county of CHESTER.—This is situate on the Parkgate Coal-Field, about four miles from the Chester and Birkenhead Railway, and consists of about SEVEN HUNDRED ACRES of LAND, having on the frontage towards the seashore FIVE WORKABLE BEDS OF COAL, which have been proved on the rise and on the dip of the ground, and it is supposed that other beds exist lower down. It is close to the boundary of the Densi Collieries, which are now in full operation, and the veins and quality of the coals (well-known to be very superior for domestic and lime-burning purposes) are the same in both.

A shipping place might be erected close to the works.—A moderate reserved rent, merging in the royalty, will be required.

Mr. John Davies, coal and mine agent, Mostyn Quay, will give any further information required; and Mr. David Williams, of Bron Eryvi, near Carnarvon, will treat with any party desirous of taking a lease.

TO IRONMASTERS, RAILWAY DIRECTORS, ENGINEERS, and FOUNDERS.—The SUBSCRIBER having been appointed SOLE AGENT in LONDON for the SALE of Mr. MORRIES STIRLING'S PATENT IRON, begs to intimate that he is prepared to SUPPLY Railway Companies, Engineers, and Founders, with the PATENT MALLEABLE and TOUGHENED CAST-IRON, and that all orders addressed to him for these, and also for RAILS, with Hardened Surfaces, shall have his prompt attention.

Specimens of the different Irons shown, and every information afforded, on application. Information as to the terms of License under Mr. Stirling's Patents will be given by the Subscriber, and also by Mr. JEE, C.E., 6, John-street, Adelphi. A. MACNAUGHT.

OFFICES,—2, Queen-street-place, Upper Thames-street.
WAREHOUSES,—Paul's Wharf, 25, Upper Thames-street.

August 2, 1851.

BICKFORD'S PATENT SAFETY FUSE.—The Patentees of the ORIGINAL, and only real, SAFETY FUSE, beg to inform Merchants, Mine Agents, Railway Contractors, and all persons concerned in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. The Safety Fuse is now projected by a Second Patent, and manufactured by greatly improved machinery.

BICKFORD, SMITH, DAVEY, Camborne, Cornwall.

MR. JAMES CROFTS, of 4, KING-STREET, CHEAPSIDE, MINING BROKER, renews his OFFERS of SERVICE to CAPITALISTS seeking the means of SECURE INVESTMENTS, which can be made to yield an annual income of 15 to 20 per cent.

Mr. Crofts has specially for Sale—Great Sheba Consols, Pendarves, East Pool, Gustavus, Wheal Neptune, Wheal Langford, Snowdon, Lamhercoe, Wheal Vincent, Wh. Benny, Appledore, Devon Consols North, West Polgooth, Duke of Cornwall, Bodmin Consols, Wheal Tremar, Ailt-y-Crib, Warleggan, Bedford United, South Tamar, East Tamar, East Gunnis Lake, Bronfloyd, Llwynmalees, Trethevy, Wheal Zion, West Wheal Virgin, Wheal Augusta, &c.

The improving condition of mining property, and the probability of its increase with the favourable state of the money market, induces Mr. Crofts to recommend capitalists to seek out *bond fide* mines for investment, of which there are abundance, both dividend and non-dividend. In the former 15 to 20 per cent. interest per annum may be realised.

Mr. Crofts will be happy to give the best advice his experience enables him for the guidance of his friends, and transacts business only for principals.

No. 4, King-street, Cheapside, August 9, 1851.

GENERAL MINING OFFICES.

23, *Threadneedle-street, London.*

MR. JOSEPH JAMES REYNOLDS, late of CAMBORNE, CORNWALL, begs to inform his friends and the public that he has COMMENCED BUSINESS as a MINING and GENERAL AGENT at the above office, and trusts, by paying a due regard to the welfare of his clients, that he will at all times merit their confidence. Having been connected with the management of mines in the most productive districts of Cornwall upwards of twenty years, and being in communication with some of the most respectable agents in the mining districts, Mr. Reynolds will be enabled at all times to furnish such information as may be relied on.

J. J. REYNOLDS will carry on business upon COMMISSION ONLY, making no intermediate price between buyers and sellers, and will be ready at all times to introduce the buyer and seller of any shares to each other.—Office hours Ten to Four.

MESSRS. FRANCIS & CO., in order to avoid the complicated and indefinite system of Calls for working or proving mines, consider that a better and more satisfactory one will be found in offering the public those chiefly in which the machinery and underground work required to bring them into a state of profit has been completed and paid for.

In mines thus far advanced, it will be obvious that as there will be no risk, so there can be no necessity for calls—the speculative part of the adventure having been gone through; and in this way capitalists will be enabled to invest with the certainty of immediate returns.

Mr. MATTHEW FRANCIS takes leave to announce, that he has several THOUSANDS of POUNDS WORTH of SHARES to DISPOSE OF, which, at the selling price, give a profit of from £20 to £40 per cent.

*** Offices, No. 7, John-street, Adelphi, London.

MINING INVESTMENT.—A LIMITED NUMBER of SHARES will BE DISPOSED OF to respectable parties on very MODERATE TERMS, in one of the most promising, productive, and best situated, SILVER-LEAD MINES in CORNWALL—nearly £7000 worth of ores having been raised above the 25 fathom level, and two other levels, a 35 and 45, unwrought, just coming into operation.

Apply to Mr. Richard Thomas, Mining Agency Office, 8, George-yard, Lombard-street.

MINING INVESTMENT.—A Limited Number of Shares are now for Disposal, on very moderate terms, in the HAWKMOOR COPPER MINE, Calstock, which adjoins the Bedford United Mines, and is parallel with the Devon Great Consols, and is surrounded by the most promising and productive mines of the Tavistock district. There has been £6000 spent on the mine in the erection of machinery, &c., and in prosecuting the works. Copper ore to the amount of upwards of £2000 has been raised and sold. On the mine is all the machinery, &c., complete.

For further particulars and shares apply to Messrs. Josiah Sims and Co., Mining Agents, Tavistock, Devon.

MR. JOHN PHILLIPS, MINERAL SURVEYOR AND MINE MANAGER, MARGARET-STREET, NORTH ADELAIDE, in the province of SOUTH AUSTRALIA, after three years' residence and two years' exploration in the colony, RESERVES his EXPERIENCE for BRITISH CAPITAL: awaiting the result of this advertisement in a suitable remuneration for past time and future services.

MR. JOHN DAVIES, MINING SHAREBROKER, *No. 38, TOWER-BUILDINGS, TOWER-GARDEN, LIVERPOOL.*

MR. ALFRED SENIOR MERRY, DEALER IN COBALT AND NICKEL ORES, AND ASSAYER IN GENERAL.—Address: *LEE-CRESCENT, BIRMINGHAM.*

MINING OFFICES, REDRUTH.—JOHN ROBERT PIKE, GENERAL SHAREBROKER (on Commission only), being resident in the centre of the Mining district, POSSESSES great FACILITIES in the DISPOSAL OF or PURCHASING SHARES, INSPECTING MINES, &c., on the most moderate and honourable terms.

MINING SHARES.—Mr. HENRY VATCHER, EXETER, OFFERS his ADVICE and ASSISTANCE to PARTIES willing to INVEST in the ABOVE SECURITIES. Ten years' residence in Exeter, together with periodical visits to nearly all the Mines in Devon and Cornwall, enables him to become thoroughly acquainted with their respective merits.—Mr. VATCHER has at his command, at all times, practical and experienced agents, so that if any inspection is required, the same can be done without delay.

MINING AND RAILWAY OFFICES, No. 3, CASTLE-TERRACE, EXETER.—Mr. JOHN JURY, RAILWAY and MINING SHAREBROKER, OFFERS his SERVICES to CAPITALISTS in the PURCHASE or SALE of ANY DESCRIPTION OF PROPERTY; and will be happy to point out a selection of such stock as appear the most eligible, from data that can only be arrived at by those who give an undivided attention to the subject.—Every information afforded (either in person or by letter) to capitalists wishing to invest or exchange their securities, and sales or purchases effected upon the best terms, and at one-half the commission usually charged.

MR. THOMAS JORDAN, METAL BROKER, No. 75, OLD BROAD-STREET, CITY, exclusive AGENT for one of the BEST MAKERS of HAMMERED IRON, for MARINE, LOCOMOTIVE, and other ENGINES. Also AGENT for the SALE of SOUTH STAFFORDSHIRE and WELSH BAR, BOLT and BOILER PLATE IRON, in all its varieties.

The Proprietors of Lead and Copper Mines in Devon, Cornwall, Wales, &c., will find great advantage in the quality and cheapness of the Iron they require, by seeking quotations through the Advertiser.

MINING OFFICES, No. 75, OLD BROAD-STREET.—Mr. T. P. THOMAS begs to inform his friends that he has REMOVED from No. 3, George-yard, to the ABOVE ADDRESS, where he hopes to receive a continuation of their favours.

MESSRS. TREVARTON AND CO., MINING SHARE DEALERS AND BROKERS,
5, ST. JAMES'S-STREET, PALL-MALL, LONDON.

MINING OFFICES, No. 51, THREADNEEDLE-STREET, LONDON.—T. FULLER & CO. beg respectfully to inform the Public that they are in a position to BUY and SELL in all the DIVIDEND-PAYING MINES, and have on hand Devon Great Consols, Bedford United, Wheal Mary Ann, Trelawny, Great Wheal Friendship, West and South Caradon, &c.; also in several YOUNG MINES, which are approaching to a dividend state, and will take pleasure in furnishing all particulars connected therewith, either personally or by letter.

MINING, AUCTION, AND GENERAL AGENCY OFFICE, No. 3, GEORGE-YARD, LOMBARD-STREET, LONDON.

Messrs. TREDINNICK & CO. beg to inform their Friends and the Public that they continue to TRANSACT EVERY DESCRIPTION of MINING AGENCY BUSINESS, and have ON SALE SHARES in most of the DIVIDEND MINES in CORNWALL, DEVON, and WALES, as well as those on the eve of paying, and situate in the best mining districts.—Loans and Money Matters in general negociated; Mines Inspected, and Reports obtained from practical agents, and every information affecting the market value of mining property afforded gratuitously.

MINES.—MOLYNEUX & CO., MINING and GENERAL SHARE AGENTS, 34, THREADNEEDLE-STREET, have SHARES ON SALE in DIVIDEND-PAYING and OTHER MINES, which will ensure to CAPITALISTS the safest and most unexceptionable investment.

MOLYNEUX & CO., grateful for past favours, beg to call the attention of their friends to their newly-occupied OFFICES, No. 34, THREADNEEDLE-STREET, where every attention will be paid to the PURCHASE or SALE OF SHARES.

*** Office hours from Ten to Four o'clock.

REGISTRY FOR THE SALE AND PURCHASE OF MINING SHARES.

DURRANT & CO., MINING SHAREBROKERS, 58, LOMBARD-STREET, LONDON, Beg to draw the attention of Capitalists to their REGISTRY for the SALE and PURCHASE of SHARES.

	Shares for Disposal.	
Devon Great Consols	Wheal Mary Ann	South Caradon
Carn Brea	Wellingtons	Great Wheal Sheba
West Caradon	West Buller	Treviskey
Trelawny	Tolgus	Bedford United

N.B.—Statistical information furnished on British and Foreign Mines.—No Charge made for the registration of shares unless business be transacted.

MINING EXCHANGE.—At a GENERAL MEETING of the shareholders of the MINING EXCHANGE, held at the Jamaica Coffee-house, Cornhill, on the 29th ult., it was resolved,—

That the Committee do conclude the proposed arrangements for holding the Exchange in the Hall of Commerce, Threadneedle-street.

That for the present it is not advisable to alter the terms of admission, except to admit of half-yearly subscribers, at the rate of £8 8s. per annum.

THE MEMBERS COMMENCED BUSINESS IN THE HALL OF COMMERCE ON MONDAY last, the 4th inst. JAMES STRIDE, Secretary.

MINING PROPERTY.—Mr. HERRON has SHARES in the best DIVIDEND-PAYING MINES FOR SALE, and which will give the purchaser 15 to 20 per cent. for the outlay. Amongst others are the following:—

St. John del Rey	East Wheal Rose	Alfred Consols
Cobre	Herodsfoot	West Providence
Copiapo	Carn Brea	Wheal Reeth
Great Devon Consols	South Basset	Botallick
West Caradon	South Frances	Levant
South Caradon	South Tolgus	Lewis
Bedford United	Wheal Seton	&c. &c.

And has also FOR SALE SHARES in MINES having a PROMISING APPEARANCE, and affording greater range for speculation, such as—

Kilbricken	West Alfred Consols	Wheal Greville
South Tamar	Wellington	Cefn Bruno
East Tamar	Merilyn West Tolgus	Cook's Kitchen.

Mining Offices, 33, Clement's-lane, Lombard-street.

WANTED,—A good CHAIN-MAKER, who can also work at GENERAL SMITHERY; and an experienced PRACTICAL ERECTOR, who can work, if required, at the LATHE and VICE.—None but sober and good men need apply to Mr. J. Phillips, engineer, &c., Marazion.

TO TIN-PLATE MANUFACTURERS.—WANTED, an AGENCY in LIVERPOOL, for the SALE of TIN-PLATES to the MERCHANTS. The Advertiser has also a good and respectable connection amongst the principal buyers in Manchester, the whole of Lancashire, Yorkshire, &c. Undoubted references will be given.—Address Mr. Thomas L. Plant, 21, Phythian-street, Liverpool.

TO MINING COMPANIES.—PORTABLE STEAM-ENGINES TO BE LET, on SOLD—simple, powerful, portable STEAM-ENGINES, on wheels, suitable for pumping, winding, &c.—Apply to Medwin and Hall, engineers, 92, Blackfriars-road, where they may be seen.

FOR SALE, BY PRIVATE CONTRACT, at Messrs. Harvey and Co.'s Foundry, HAYLE, CORNWALL, TWO CAST-IRON STAMPS AXLES, for 12 heads each, with bearing blocks, brasses, &c., complete, and all new.

Apply to Messrs. Harvey and Co.; or to Mr. Jenkin, Treworgie, Redruth.
Hayle Foundry, August 4, 1851.

ON SALE,—Six and Twelve-horse HIGH-PRESSURE STEAM-ENGINES, suitable for MINING, or OTHER PURPOSES requiring great strength in the construction.—Can be seen at John Ellis, jun., and Brothers, engineers and millwrights, 15, Backwater-street, Manchester; and at John Ellis's timber-yard, 89, Old-street-road, London.—Also, ONE DOUBLE DEAL FRAME, and ONE FRAME for cutting either balk or deals.

NICKEL ORE—SALE BY TENDER.—A PARCEL, of about 75 cwts., LYING at the IMPERIAL SILVER MINES, at JOACHIMSTHAL, in BOHEMIA, and containing 34·7 per cent. Nickel, and 2·95 per cent. cobalt, is TO BE SOLD to the highest bidder, BY TENDER.

Buyers are required to send in their tenders to the Imperial Ministry for Agriculture and Mines at Vienna before noon on the 1st September, 1851.

The Special Conditions for this Sale, by Tender, may be obtained on application to Messrs. AUGUST FABER AND CO., 60, Mark-Lane, London.

SMALL COALS, of good quality, FOR SALE, at 8s. 6d. per ton delivered.—Apply to Mr. Coles Child, Great Northern Railway, Kings-cross Station.

LEAD WORKS,—SUTTON-ROAD, PLYMOUTH.—SPARROW, HODGE, & CO. respectfully inform the Trade and the Public that, having completed their machinery, they are in a position to SUPPLY PIPE and SHEET LEAD of every description, manufactured on their works.

OLD LEAD BOUGHT at MARKET VALUE, or taken for manufactured goods, at the accustomed rate of exchange.—July 10, 1851.

PENVIVIAN COPPER MINE, LANIVET, near BODMIN, CORNWALL.—The OFFICES of this COMPANY are at Mr. MAT. FRANCIS'S, No. 7, JOHN-STREET, ADELPHI, LONDON, where every information may be obtained.

WHEAL TREASURY,—Granted at 1-24th dues, or royalty. Divided into 1000 shares, of £10 each—to be paid by instalments as may be required.—Now and for upwards of 18 months past working on the Cost-book Principle. The ores now raising will more than pay the current cost. A steam-engine and other necessary machinery are indispensible for the further development of the mine.

Specimens of the mine, and prospectuses, may be seen and obtained at Mr. Fenton's office, 5, White Hart-court, Lombard-street, London; or prospectuses may be obtained of John Roscorla, Esq., the purser, Penzance, Cornwall; also of Mr. J. Jones, mine broker, Butler's Head Tavern, Great Bell-alley, Moorgate-street, City.

LEWIS MINING COMPANY.

Salvador House, London, July 30, 1851.

At the ANNUAL GENERAL MEETING of the shareholders, held this day, RICHARD HODGSON, Esq., in the chair,

The reports and accounts having been read, it was—

Resolved,—That the report and accounts now read be received, adopted, and entered in the company's cost and transfer book.—Carried unanimously.

Resolved,—That the thanks of the meeting are due, and are hereby tendered, to the Chairman and Directors, for the ability and constant attention to the business of the Company.—Carried unanimously.

TAMAR SILVER-LEAD MINING COMPANY.

FORFEITURE OF SHARES.

Notice is hereby given, that if the CALL of £1 per share, due 4th of November last, BE NOT PAID, with interest, on or before the 13th day of August next, the SHARES on which the said Call remains unpaid will be ABSOLUTELY FORFEITED.

The shares not paid upon are 342 out of the 9600, and the numbers are as follows:—

117, 169, 183, 188, 248, 258, 259, 261, 275, 276, 294, 552, 658, 787, 788, 797, 798, 799, 800, 801, 802, 803, 1113, 1114, 1116, 1117, 1120, 1121, 1128, 1129, 1130, 1131, 1151, 1154, 1155, 1186	Say, 36 scrip certificates, of 5 shares each = 180.
1265, 1266, 1267, 1268, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1494, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1581, 1586, 1610, 1611, 1629, 1631, 1646, 1647, 1659, 1660, 1663, 1664, 1665, 1666, 1667, 1668, 1671, 1713, 1791, 1793, 1809, 1857, 1858, 1859, 1888, 1896, 2020, 2028, 2029, 2062, 2338, 2372, 2389, 2390, 2400	Say, 54 scrip certificates, of 3 shares each = 162.

By order of the board, P. STAINSBY.

Salvador House, London, July 24, 1851.

CEFN GWYN MINE.—WE, the undersigned, being holders of 1000 (2500ths) SHARES and upwards in the CEFN GWYN MINE, do hereby, in consequence of the resignation of Mr. H. B. Bousfield, the secretary, and Mr. Joseph Tredinnick, the purser, of the mine, and of the delivery to Mr. Thomas Jordan, by the said Secretary, Purser, and Mr. Richard Tredinnick, of the cost-book, certificate, and other books, documents, and papers relating to this Mine, CONVENE a GENERAL MEETING of the shareholders of the Mine, to be HELD at the George and Vulture Tavern, George-yard, Lombard-street, London, on Monday, the 11th day of August, 1851, at Twelve o'clock precisely, for the purpose of electing a Secretary and other officers of the mine, examining, allowing, and passing the accounts of the late Purser—to alter, amend, or rescind, the resolutions passed at a meeting of the shareholders of the mine, held in London on the 2d day of July, 1850, or any of them; and to pass such further or other resolutions as shall be considered necessary for efficiently working and conducting the business of this mine.—Dated and signed in London this 29th day of July, 1851.

THOMAS JORDAN—THOMAS SMITH—JOHN BOWES.

ROYAL SANTIAGO MINING COMPANY.—The Directors of this Company hereby give Notice, that they have made a CALL upon the shareholders of TWO POUNDS per share, to be PAID to Messrs. Glyn and Co., the bankers of the Company, on or before the 15th day of September, 1851.

By the terms of the agreement constituting the Company, all shares of those proprietors who do not pay the said call of £2 per share within 30 days after the said 15th of September, will be absolutely forfeited.

The form to make the payment will be delivered upon application at the office of the Company.—38, Broad-street-buildings, July 9, 1851.

ASSAY OFFICE AND LABORATORY, 23, HAWLEY-ROAD, KENTISH TOWN—conducted by Mr. MITCHELL, F.C.S., author of "Manual of Practical Assaying," &c.—Mr. MITCHELL begs to inform the Mining and Manufacturing Public, and Bullion and Metal Brokers generally, that he continues to conduct ASSAYS and ANALYSES of MINERALS, METALS, SOILS, MANURES, and all other MANUFACTURING PRODUCTS.—ADVICE to PATENTEES and MANUFACTURERS on all MATTERS involving a knowledge of Chemistry.

INSTRUCTION, as usual, in ASSAYING, ANALYSIS, and METALLURGIC MANUFACTURING CHEMISTRY.—23, Hawley-road, Kentish Town.

Original Correspondence.

ON MINERAL VEINS.—No. I.

BY DAVID MUSHET, ESQ.

After a voluminous discussion, your correspondents appear to have come to agreement on one particular—that nothing is known of the origin of mineral veins. This is to me extraordinary, when proceeding from persons whose practical habits direct them to inquiry upon every thing connected with this subject. I should have supposed such individuals at least would have made themselves masters of a work on mining which has been seven years before the public, giving a sound, lucid, and consistent explanation of the origin and formation of such veins. As to such correspondents as the London "Cosmo," or "Cosmos," whichever he intends as his designation, we know that the London world is a world peculiar to itself, differing much from the world of the "outside barbarians." If it is taught in that region that the earth is a bubble blown out of the sun, and they learn from their geology that granite has once been in a state of vitreous fusion—perhaps by the late fire near London-bridge—it is not surprising that they should look upon the facts of geology in Mr. Hopkins's volume as matters with which they have no concern; but that such indifference should exist in districts of a different geological character does, I confess, astonish me. "Cosmo's" letter would have been more interesting had he told us when the bubble period of the sun ceased, what connection it has established with those "bubble periods" of the earth which so often affect the metropolis, and whether it influences the oxygen periods which occasionally attract so much heavy metal to the surface of the pockets. But as even "Cosmo" professes a desire to learn, I cannot resist giving a brief abstract of Mr. Hopkins's explanations of the formation of mineral veins, that all who have confessed their ignorance may turn to the original, and seize the opportunity of getting wisdom.

The opinions in Mr. Hopkins's volume are not founded solely upon his own observation. The great fact which he has reduced under the guidance of a principle has been observed and commented on by the most eminent geologists, from Humboldt to Sedgwick. He advances no startling novelty, but brings accumulated and isolated facts, testified to by the first authorities, under the explanation of a simple law. These observers, previously and contemporaneously with himself, had noticed that the masses of the primitive rocks in all parts of the globe are ranged in parallel lines of cleavage, in one uniform direction north and south, or varying only a few degrees east or west of the meridional line. Though observed upon as a remarkable fact, too constant to be the effect of accident, it remained for Mr. Hopkins to gather the details under the law of a presiding principle, and point out that these arrangements were not the fruits of a transitory or extinct agency, limited to some period of their supposed formation, but the constant result of the magnetic current flowing through the crust of the earth from pole to pole, and which now, as well as then, exerts the same energies with the same effects. In accordance with this view, and with a comprehensive grasp of physical facts, he dismisses that very partial and inadvertent notion of the nature of rocks, which conceives them to be rigid and inelastic bodies. Accustomed to see such hard substances protruding from the summits of mountains, or standing in the face of cliffs, the mind has given less attention to the fact that they have length and breadth, as well as thickness. Because these partial fragments are hard to a certain degree, the whole mass of primitive rocks, covering thousands of square miles, have been too much conceived as fixed substances, immoveable except by tremendous and explosive bursts; and the "variety of hill and dale, river and lawn," have been attributed to immeasurable convulsions, which so far from creating such a surface as we behold, must have shattered the crust into a heap of untenantable ruins. A more just and comprehensive judgment points out that the mass of the crust of the earth, of which the craggy peaks exposed to view form an incalculably small fractional portion, consists of sheets of moist and pliant matter, flexible in proportion to their humidity. The vast opportunities afforded by the gigantic geology of South America, has enabled Mr. Hopkins to confirm this just conception by the fact that, at great depths, the granite base, which wanton theory has transformed into a vitrid crust, is in a soft and semi-fluid state—a condition which, if we only reflect on the non-compressibility of water, must obviously be inevitable where there is no opportunity of drainage. Rocks raised far above the sea level, drained from beneath, and indurated upwards by atmospheric action, resemble as little the main mass of the crust, which stretches from sea to sea, as they bear small proportion to its extent; but even the highest and driest rocks are not without their moisture and their pliability. Some of your correspondents write of granite as if it were a substance as uniform as chalk or hen's eggs, instead of presenting a variety of character, equally great as is offered by any one group of rocks. This rock, *granitus* or *grained*—so called from the massive and distinct grain of its crystallised composition—when in its greatest perfection, with large lamintaied facets and multiform solid crystals, of every shade of colour, presents a character more opposite to, and more incoherent with, the features of any known product of vitreous fusion than can be pointed out in the whole geological series. The intrinsic evidence which points out such an origin would much more prove that plum-pludding stone was an offspring of the fire. The next place in the series of primitive rocks has been given to gneiss—a variety of granite in which the crystalline grain is comparatively obliterated. The third member of the series, and to which the theorists have been merciful enough to afford a cooling draught of water, is the primitive slate in its different varieties—the agglomerated crystallisation of the granite being therein entirely extinguished. Instead of these rocks being independent formations, and the latter the first sedimentary deposit, as had been held, Mr. Hopkins has clearly established, by laborious examination of the perfect series in the immense sections furnished by the trans-Atlantic elevations, that they form one identical formation, modified in appearance by the constant action of the magnetic current—that granite in moist mass, not in dry exposed peaks, passes by insensible decomposition and re-crystallisation into gneiss, and gneiss into slate—the change succeeding always in a northerly direction, and each step of the series possessing the predominant minerals, which constitute the granitic base.

He asserts there is no perfect section of these transitions to be found in the limited extent of the British primitive rocks, which has led naturally to incorrect deductions. Nevertheless, bands of clay-slate are found in granite, and bands of granite in clay-slate; and where large surfaces of the granite formation are exposed to view—as, for instance, at low water-mark—we find every variety of primitive rock in such juxta-position, mingled in bands and masses, of every shade of colour and degree of crystallisation and non-crystallising action, and cleft through without distinction of age by the same continuous joints, that it must have been a surprising machine indeed by which the plutonist succeeded in injecting and insinuating his granitic and porphyritic complications.

Mr. Hopkins having established his position, by universal testimony as well as his own observation, that the primitive rocks are ranged in channels in the direction of the magnetic current from south to north, adduces a mass of evidence to prove that this current is still producing the same effects in a similar direction upon the pliable and undulating crust. This being once established, and its crystallising agency ascertained, by the clearest evidence, as, for instance, that in east and west veins passing at right angles to the current, the contents are crystallised from *wall to wall* in the direction of the current, and in north and south veins passing parallel to the magnetic current, the crystals range in laminæ and shoots *parallel* to the walls, *still in the direction of the current*, there remains little difficulty in explaining both the origin and the filling of mineral veins.

The passage of the magnetic fluid maintains a constant tension through the masses of the terrestrial crust. When the micaceous and talcose elements predominate in the rock, its tenacity permits it to endure this tension without fracture. But when these tenacious constituents are deficient, the tension produces ruptures, more or less, nearly at right angles to the line of the elongating force. These ruptures are the east and west veins, in which the great bulk of metallic produce is found. The same force which makes the fracture deposits a gradual crystallisation upon the walls, which, filling and acting jointly with the original tension, continues to widen the fissure, and produce the present condition of lodes. Nothing can be more simple than this explanation, or more entirely in accordance with the direction of mineral veins with their contents, and with the known facts attending on aqueous crystallisation. The mineral treasures of Cornwall are found in that variety of the primitive rocks which is most deficient in mica, and, therefore, most liable to tensional fracture.

The other operation of the magnetic force upon the solid crust is to produce longitudinal fractures, or splits. The rocks are ranged by its action in meridional channels, or lines, according to the proportions of their components. "Quartz follows quartz, felspar follows felspar, and mica follows mica." These channels being of different elasticity, are variably acted on by the tensional elongation. Some channels are moved more, some less, in the northern direction; hence the longitudinal divisions of north and south veins, flookans, cross-courses, &c., with their corresponding heaves. [*To be concluded in next week's Mining Journal.*]

A FEW WORDS ON THE LATE DISCUSSION ON THE ORIGIN OF MINERAL VEINS.

SIR,—I believe every practical scientific man who reads your Journal will agree with some of the remarks of your correspondent, Mr. Faber, St. Austell—viz.: that a large space is occupied in your columns by vague theories of persons totally unqualified to enter into such an abstruse subject as the science of geology, or the formation of mineral veins. However, your correspondent must not suppose for a moment that such communications have any influence on men of business, nor in the practical operations of Englishmen. Our industry and inventions have succeeded not by the aid of theories nor professors, but by the perseverance of practical men, guided solely by common sense, and by strictly observing experimental laws, and those daily seen in Nature. All our progress—be it in what branch it may—is pre-eminently dependent on practice and observation. The labours of the mere theorist are never attended to by our practical men. These are looked at as mere imaginary effusions, furnished to amuse the curious. Having, I trust, removed the impression of supposing that all the papers inserted in the *Mining Journal* on the subject in question represent the state of our present knowledge in *practical* geology, I shall make a few observations on the following:—Your correspondent says, "I myself, having devoted myself entirely to the theoretical and practical study of these sciences, feel it my duty to warn the public," &c. "I permit myself to say that the increase of temperature towards the centre of the earth has never yet been disputed by a scientific man—geology giving us most ample and positive proof of it," &c. This question has not only been disputed, *as far as a constant increased temperature is concerned*, but it has been proved that the variation of temperature is dependent on the composition of the rocks, and not solely on the depth. For instance, granite below is often found colder than the slate above. Gold, tin, and lead mines are generally much cooler at equal depths than copper mines—many portions of the upper workings are found by experiments much hotter than the deeper, &c. The greatest depth of the ocean is cooler than the surface; hence we find that the heat below is not governed by the distance from the central nucleus, but by the chemical operations which are constantly going on in the subterranean laboratory of Nature; and further, in sinking, the deeper we go the greater is the degree of *aqueous saturation* in the rocks. Not a single instance has ever been found where we have been obliged to throw down water to cool the primary rocks. Pumps are always required to draw up the water.

Our coal beds have often suffered from intense heat generated by sulphuretted and carburetted hydrogen, whilst the calcareous beds underneath have been found perfectly cool. I could detail a series of experiments, made to the depth of 2000 feet, showing similar results. In analysing the component ingredients which form the fundamental rocks, we find them containing from 5 to 15 per cent. *of water chemically combined*, which could only be produced from aqueous crystallisation. These facts are daily within our reach; and are not the assumptive dicta of men.

Your correspondent states—"As to the origin of granite, a beginner in the study of chemistry will be able to prove that combinations of the constitutent parts of felspar, or mica—the analysis of either of which shows such a complicated formula—will crystallise only in passing from the melted to the solid state in cooling off." Your correspondent has an excellent opportunity at St. Austell of selecting a variety of felspar, and studying their character *in situ*; and as he has been trained to investigate the subject, and, as the question is, so easily determined, it will be interesting to obtain a demonstrative proof, showing how the following elements can combine into a perfect geometrical figure from a state of incandescence—silica, alumina, potash or soda, lime and water, into a transparent crystal of felspar.

The theories of MM. Elie de Beamount and Leopold Von Buch—"elevations of mountain chains," and "craters of elevation"—are as useless to mining operations as the "igneous theory" of our own philosophers; therefore, it is of no avail to refer to them.

No authority can upset observed facts—Englishmen are too much of a practical race to accept mere *opinions*, even of philosophers; and as your correspondent is "now engaged in a trip through the mining district of England," he will do well to imitate their example. I think that he is fortunate in not having his books to fortify the assumptions; and if he is an intelligent observing man, he will learn a lesson very different to his present ideas, and render himself a useful member in mining operations. Unfortunately, the lectures of our theoretical geologists, as well as the study of their works, have hitherto rendered many a promising youth somewhat useless to our practical operations—hence the cause of the proprietors of our larger works avoiding them, and preferring the most uneducated practical men. They become, as your correspondent correctly states, "Will-o'-the-Wisp-like luminaries," as useless to themselves as they are to others; and thus strengthen the common opinion—viz.: that *mining* schools appear to injure the mind, instead of doing any benefit, inasmuch as they tend to inculcate prejudice, conceit, and wrong notions; and, therefore, they find that the *mine* is, as yet, the only school in which the practical sciences of geology and mining can be correctly and usefully acquired.

London, August 7. EVAN HOPKINS.

CHAINS v. ROPES IN MINES.

SIR,—Following up my communication of July 1, in correction of the article by Mr. Matthias Dunn, Mine Inspector, I am happy to find my experience of the use of chains for "winding" in mines corroborated by Mr. M. Tipton, of the Old Park and Strichley Collieries, near Shiffnal, Shropshire, as well as by many others, whose experience renders their testimony worthy of confidence, and more especially by Mr. W. Radley, Ch. E., of London—a remarkable instance of the general trustworthy nature of chains for colliery uses, and especially the two and three link flat chains, with each alternate set of links filled and supported with a flat piece of beech wood, the links fixed in their places thereon by short stub-headed nails, as given to me by Mr. Radley.

About the year 1828, at Werneth Colliery, near Oldham, two pits, the "Stable Field" and "Shooting Butts," were served with two flat chains of this kind, which, having been in constant use several years, had become so thin by wear, as to be subject to fracture in some of the links of each of three "strands," so frequently as to be for days together entirely severed, although doing constant work, winding about 16 cwts. each time of coals, waggons, chain, clutch irons, and appendages. This seems a paradox, that a chain should be completely severed, although performing its usual heavy duty, but the method of it is this—that, as in the length of, say 10 feet of this sort of chain, with 4-inch links, it will be seen that there are 30 sets of three links each, forming three strands of a flat chain, of which 15 alternate sets lie on edge, so that when the chain lies flat down we can see through the links, whilst the other 15 sets of three links are occupied by wooden linings driven through their spaces. Now, as in the case recorded by Mr. Radley, when it was his luck to "come out" safe upon the usual load at the end of the chain, *one link in each of the three strands composing the chain was severed in the space of 10 to 12 feet, creating a virtual fracture of the chain, which was still held continuous by the 15 to 18 wooden linings in each alternate set of links!* The banksman made no bones of this singular condition of the chain, which was of common occurrence without accident, the "piecing" of the chain being generally performed on a Saturday or Monday, as occasion served.

A chain is safe where a rope is treacherous, but I must certainly record my preference of the wire ropes, such as are now in use at Smith's Fold Colliery, Little Hulton, Lancashire. The chief objection against chains is the noise they make upon the metallic pullies of the carriers and headstocks; but, beyond this, as Mr. Radley likewise attests, they are infinitely more safe than any rope. Perhaps if the art and operation of rope-making were less empirical, and more in accordance with the chemical enlightenments of the day, much less real objection might be made to hempen ropes, or they might successfully take their stand with chains and wire ropes in mining uses, which cannot, however, be so long as the tar with which the hempen fibre is imbued is used indiscriminately.

I remember in 1839 the application of two 1½-inch round ropes to the incline of the Manchester and Leeds Railway, near Todmorden, one of which, made with Archangel tar, broke five times in 15 months. After the expiration of the first seven months, the other, imbued with the same tar, freed by Mr. Radley from some corrosive or xymotic ingredient, abounding more or less in all tars, worked as its fellow during 2½ years without a single rupture. This sort of knowledge and experience seems exterior to the capacity of the colliery inspector.

Having now placed on record my experience of chains for mining uses, which happens to be in contradistinction to the doctrine of Mr. Matthias Dunn, I will conclude by promising you a plan and description of colliery ventilation, effectually superseding all mechanical appliances, first obtained by me from its application by Mr. Radley, at Werneth Colliery, in 1827, and adopted with the most marked success at Little Hulton, if you will provide a very simple wood-cut. JOHN MARLOR.

Little Hulton, July 8.

RULES FOR THE VENTILATION AND WORKING OF COAL MINES IN SCOTLAND.—No. II.

6. That when a pit and its workings are to be aired by a partition alone, a furnace properly constructed is to be made, and equal to the contemplated extent of the workings, either at the pit bottom, or up the shaft a little way, with proper roads to the same.

7. When two pits are used for ventilating each other, the rules 5 and 6 may, to a certain extent, be departed from.

8. When a pit is ventilated by a partition, the pit bottom to be securely constructed against the chance of accidents, and for confining the air, either by wood, stone, or brick, into its proper channels.

9. These rules to be observed in every mine, whether fire-damp or choke-damp exists.

10. There are other auxiliary measures for insuring ventilation which can be adopted, such as forcing fresh air down the shaft, either by machinery or by a fall of water.

11. That when fire-damp does exist, the fireman of the pit shall examine all the workings before the men descend; and that where more than one fireman is required, then they shall seperate to their several districts, meet again at the pit bottom, and ascend the shaft together.

12. That the engineman and pit-head man shall prevent the miners descending into the pit, until the fireman has reported the same to be clear and fit for working; but as it frequently happens that a pit may be quite safe for working, yet there may be a few rooms with fire-damp in them, in that case the workers in these rooms are to be personally told so by the fireman.

13. The above precaution is not so much required for choke-damp.

14. That when two or more seams are worked by the same shaft, it will be required, and strictly enforced, that the air be not divided, but carried down in one distinct body, either to the first, second, or third seam, and from one seam to another in one column, as may be found most suitable.

NOTE.—What is meant by this regulation is to prevent those in charge from trying to give to each working seam its own share of the air, and no more; but it is too often the case that this equal distribution does not take place, and accidents are, in consequence, common. And preparations should at all times be made to ventilate one, two, or three seams separately or together. This is the most essential rule, so far as we have yet gone.

15. With due care in ventilation there is no mine in Scotland that would reguire the entire use of the safety-lamp; there may be partial portions where it might be thought advisable to use it, but miners are so notoriously addicted to smoking, that it becomes unsafe to entrust them with the means of lighting their pipes. In Scotland, therefore, the daily and constant use of the safety-lamp is not required.—M.: *Glasgow, July 30.*

BLAST-FURNACE FOR THE MANUFACTURE OF IRON.

SIR,—You have given a very pretty half section of a blast-furnace in last week's Journal, received from a correspondent at Glasgow. It would be a further kindness if your correspondent would be so obliging as to furnish the diameter of the blowing cylinder, the length of stroke, and the number of strokes made in the same per minute, to deliver to the furnace the air passed through blowpipes of the aggregate area of 40 square inches under a pressure of 3 lbs. per square inch, as stated. A scientific purpose induces this inquiry. BENJAMIN THOMPSON.

Newcastle-upon-Tyne, Aug. 4.

VENTILATION OF COLLIERIES.

SIR,—As the Government have given notice to the newly appointed inspectors of collieries to furnish reports of their proceedings and experience since the commencement of their duties, it might be considered out of place just now to call attention to any particular mode of ventilation; but as their reports can neither add to or detract from the system on which I would wish to insert a few remarks in your valuable columns, they can at least do no harm, and may induce some colliery managers who, in opposition to the most direct evidence of its value, still pursue their own blind course, to take the matter into fair consideration, which I feel satisfied will end in an acknowledgment of its superiority and perfect effectiveness. I allude to Mr. Benjamin Gibbons's truly philosophical plan for working the Staffordshire 10-yard coal, a description of which he published in 1847. This work you noticed in the *Mining Journal* of 9th January in that year when you remark, "in which the author, we verily believe, approaches nearer to the great desideratum than any of the numerous but futile plans which have been so often paraded before the public, but which have proved to be as far as ever from a correction of the evil." I have no doubt that such is the case, and that eventually the principle, if not the exact mechanical details, must be adopted in all our collieries. Feeling, therefore, the desirability which exists that the principle should be well understood, I trust you will insert these few observations, with the following explanations, being the summary of a paper by Mr. Gibbons, read at the proceedings of the Institution of Mechanical Engineers, at the general meeting held in Birmingham on the 23d April last.

After an introduction explaining the general defects of the usual systems of ventilation, and repudiating all plans which are not self-acting, and founded on natural laws, as also those requiring mechanical operations to *force* ventilation, the paper proceeds to explain the plan adopted by the author. Instead of two shafts, one only is sunk, say 7½ ft. diameter, and by its side a smaller one 3 ft. in diameter, called the air chimney: these are sunk simultaneously, and the small one very little impedes the sinking, as an additional man has room to work in it, and he keeps pace with the sinkers of the shaft; it is also bricked with it, forming a partition of double thickness and great strength from the two arches of the circles abutting against each other. The gate road is driven from the shaft at the bottom of the coal as usual, but the air head is driven within 2 feet of the top of the coal, or even higher if practicable, and connected with the vertical air chimney. The gate road and air head are carried on in a parallel direction to the extent of the works, and spouts or openings are driven up to connect them at about every 15 yards, each one bricked up as another is opened in advance, so as to make the current of air traverse the whole extent of the gate-road, before it rises to the air-head and passes away to the chimney. Nothing can be a better proof of the perfection of this system than the workings in the Kingswinford pits, which being contiguous to a fault abounded so much in gas, that when a spout was carried up a few feet it became so filled that the men could not work, yet by boring only a 4-inch hole into the air-head the gas flew off instantly, followed by a stream of air sufficient to ventilate the gate road, and the men could work in the spout with candles in perfect safety. The excavation of the coal is commenced in the same manner as in the ordinary system by driving at right angles from the end of the gate road to begin a side of work, and the ventilation is carried on completely and continuously from the extremity of the working, while the whole coal to the top is removed. To keep up the rarefaction of the air at the top of the air chimney, a brick flue is built at the surface, from 30 to 40 ft. high, against the engine chimney if possible, or in connection with a small furnace; this arrangement secures a rapid current of air through the workings, and the perfect security of the men below—in some few cases Mr. Gibbons has substituted a steam jet with good effect. The author has adopted this principle for upwards of 30 years, in working both the thick and thin coal seams, and has been found to give an *absolute command* over the ventilation of every part of the mines. With facts like these made public, and the development in practice of a principle founded on true inductive philosophy, the number of those distructive explosions which we have hitherto had to deplore may be greatly, if not almost altogether, prevented; and there can be no excuse for the parties implicated, when unsafe modes of ventilation lead to the immolation of human life.

Stroud, July 30. HUMANITUS AMICUS.

EXCAVATING MACHINE.

SIR,—Can you induce any of your correspondents to inform your readers whether the machine invented by Mr. Mans, the government engineer of Turin, has been tried in the excavation of adits or shafts in mines. The machine is said to be capable of cutting out tunnels in rocks with great rapidity and economy. It is now stated, in some English papers, that Mount Cenis can be perforated, within a short time, for the Sardinian Railway, by means of the new engine of Mr. Mans. Pray is there any model of it at the Exhibition, or can you obtain a description of it for— AN ANXIOUS MINER.

MINING DIVIDENDS AND CALLS.

SIR,—My attention has been drawn to the list for the month of July, published in your last, the calls amounting to 25,429*l.* 8s. from 32 mines. Of the first half, with the exception of Callington Mines, the sale of ore is a mere bagatelle from the entire lot; the principal part as yet have made no sales whatever. Several of them are making further calls upon the paying shareholders, while arrears are suffered to remain in default to an unwarrantable extent, for I contend they ought to be immediately and legally forfeited. It is but justice to those who respond to the calls that they should be so.

There are only five in these sixteen that are unworthy of the call, in my estimation. I have my doubts as regards them, and some others, ever realising the expectations of the parties interested. First, I do not expect the calls will be responded to, so as to enable the agents to work effectually; and, if they are, time will wear out the patience of the parties paying long ere the workings have reached the depth likely to show the least good result. One of these concerns deluded the holders by a paltry dividend of 2s. 6d. per share, paid out of the capital, and now calls for 20s. per share, to erect an engine and try the mine. Such doings are injurious to legitimate mining, and richly deserve the exposure given by your correspondent "O. P.," of Cavendish-square, in the Journal of the 5th July. No one detests such malpractices more than I do; and although the plain truths I adduce are unpalatable to some parties, it is overbalanced by the good it effects by publicity, in preventing others being duped by knaves, or falling into the designing pits set for them by the advertising quacks, who vend their nostrums only by assuring the public that they are "dividend mines, paying from 25 to 40 per cent."

It would occupy too much of your space to dilate further; I will, therefore, proceed to the 16 mines on the second column. They are not only in the same plight as the other, but to a greater extent, for one-third of the lot will, I predict, soon become extinct. Only three of them have hitherto sold a ton of ore, and several of them are under liabilities to merchants and others which they are unable to discharge, while a large portion of the shares are suffered to remain in arrear of calls.

It behoves every shareholder to be vigilant, and watch the adventures they are embarked in, the same as they would their own established business; it would not occupy much of their time to cast their eye over all receipts and payments once every month or two, and see that the accounts are honestly kept, economy practised, and a proper system used in developing the mine or mines they are each interested in, or delegate that power to some individual resident on the spot, if duplicate accounts are not kept in London. A large portion of the money lost in mines is occasioned by the want of a proper system being observed, and a watchful eye to see that economy is practised. Where the shareholder evinces an apathy the agent is likely to be careless and improvident, the labourer idle and indifferent to the interest and welfare of his employer; and so, from one stage to another, the concern begins to totter, debts are incurred, and all becomes a wreck for the want of better management. Were it otherwise, mining would, properly conducted, be found one of the safest and best investments.—ARGUS (of Truro): *August* 4.

ILLEGITIMATE MINING.—No. II.

SIR,—Resuming my remarks on illegitimate mining, I would observe that—

6. The agreement to pay *excessive dues* is another illegitimate act on the part of grantees. The subject of dues, or toll dish, or tribute, is a matter arranged between the grantor and grantee in every case, and, therefore, the amount is arbitrary and unfixed, until *so* fixed. It would not be well to have it alike in all cases, because the circumstances of the mines are so diversified—some mines being deep and unprofitable, others shallow and rich. For instance, it would be very unfair for deep mines, like Gwennap Consols, United Mines, Tresavean, Dolcoath, &c., to pay so much for dues as such mines as Devon Great Consols, North Pool, the Bassets, &c., which are comparatively shallow and rich. The *quality* of a mine being in most cases unknown at the time the grant is made, the *depth* is often considered in adjusting the dues. Other circumstances may often enter into the consideration of the grantor, such as the *reported* state of the mine when left by a former party (if worked before), and the *competition* which sometimes exists to obtain the grant. In the deep Gwennap Mines the dues are, I believe, about 1-32d in money; in other mines, varying from 1-12th to 1-20th. I now speak of copper and tin mines. I have been informed that the late Wheal Williams Company agreed to pay 1-12th dues and one-half of all profits—a very unwise agreement, which I hope the *present* company have avoided, as being excessively unfair. I have observed that gentlemen applying for setts are so eager to obtain them, that the landowner, or his agent, is allowed to have his own terms, which in some cases are very hard upon the adventurers. I do not think that a landowner should have a penny for dues until the adventurers have been reimbursed for all their outlay; but they should compensate for all waste occasioned by the mining operations. Nor do I think it reasonable that the landowner (the grantor) should compel the adventurers to leave in his hands all the buildings erected by them. They should either have a lease for a term of years, certain or for lives, that, on ceasing to work they might sell the buildings as part of, or together with, their working stock. I do not think that, in any case, except that of a known rich mine, the dues should exceed 1-18th in money. However, I prétend not to lay down a rule.

7. In times far gone by, an error on the side of economy in mining expenditure might be looked for in vain: not so, however, in modern times. I here refer to the *allowance to agents* for pay-day, setting-day, and other business-day dinners. I have heard that, 25 or 30 years ago, in one mine, the account-house expenses amounted to about 100*l.* per month! That was too high, clearly; but I can now notice a modern dividend-paying mine in which, if I have been correctly informed by a person living near to it, the agents, several in number, are allowed only 1*l.* per month for all expenses, dinners, drink, and everything! Agents so circumstanced have special need to pray, "Lead me not into temptation," for really unto men whose principles are not very firm, a *temptation* might find a little room. Not so, though, in the present case; those agents endure their "hardship like good soldiers," while their near neighbours (agents), are comfortably provided for on the days aforesaid. The mine now referred to is not far from a rocky eminence in the vicinity of Lelant, Cornwall. I hope the *adventurers* will be able to identify it, and be more liberal to those who faithfully serve them.

8. To conduct a mine on the *scrip system* is bad, because, except at meetings of adventurers, you cannot know who your co-adventurers are—the scrip, which is the proof of title to a share, flying about like bank notes. I never would connect myself with such a system, and the sooner scrip mines are worked on the Cost-book Principle the better.—R. S.: *Truro, August* 4.

MINERAL VEINS—VENTILATION.

SIR,—The subject of the formation of mineral veins appears to dwindle into a point, and as that diamond is not found to cut, I hope that your correspondents will turn their attention to more interesting subjects, and which may lead to beneficial results. Allow me to suggest that ventilation be a subject for discussion: really when I notice the continual sacrifice of human life, causing so many widows and fatherless children, I had almost said, in haste, that all men are careless. It, however, shows that mining has not arrived to perfection; it is humbling to our pride as a nation, and takes the shine off boasted science, especially now-a-day, when impossibilities are hardly allowed to exist. Would it not be well if Government should offer a prize for the best suggestion and model for ventilating our coal mines? The scheme or model should not be rewarded until tested to satisfaction. I have an idea how good ventilation can be carried into effect—are there any Government parties who are interested in considering such suggestions?—J. WEBB: *St. Austell, July* 29.

CROSS-COURSES, HEAVES, AND SLIDES.

SIR,—Among your numerous correspondents I have not observed that any have enlarged on this subject, and the influence of cross-courses on lodes, with the exception of Mr. FOX. With much experience in practical mining, I wish to call attention to it, in the hope that others more able than myself may illustate and explain many phenomena observed in practice, which, although apparently insignificant to those who are careless observers, are well worthy of attention, as enabling the miner to form a correct judgment of what certain changes in opening ground may lead to. I have seen mines without cross-courses, heaves, or slides, but do not recollect any such being productive ones; when they do occur the lodes are more productive at the intersections than any other places. There is a cross-course taking the whole range from north to south through Creeg Braws, Poldice, Wheal Maiden, Consols, and the United Mines, in which mines all the parallel lodes made plenty of copper and tin ores. This cross-course crosses at right angles, and in no one case has it heaved the lode more than its width. Some cross courses traverse the lodes in an oblique direction, and in some instances heave the lode 100 fms. A lode in such case shows the effect of the heave a great many fathoms before coming to it; and as many fathoms as the lode has gone out of its proper angle on one side, so many fathoms will it come back on the other, until it comes again to its proper angle where the heave began. I have only known one exception, Wheal Fanny, at Devon Great Consols, where there appears a swell in the lode, and a deposit of ores between two hard stratifications. Some lodes are more affected by heaves than others; Calloway's lode, in Perran St. George, was disordered by the slightest cross branches. Where a lode is productive on one side of a cross-course it generally makes on the other; where not so, it would be almost useless to look for it on the other side. A lode in Morvah and Zennor was of this description; the tin ore died away before coming to the cross-course, and no more could be found. In many mines in the Brazils which I have inspected the gold occurs very similar to the tin in this country, and slides appear to me to have the same effect on lodes as cross-courses; but from want of a better knowledge of them, lodes have often been lost, and mines given up which would have proved productive. At Wheal Wallis there was a slide which altered the dip of the lode; at 12 fms. the underlay was 27° north, it then took a south dip until the 22 was reached—a slide was met with. Had the shaft been continued at the above angle to the 40 fm. level, there is no doubt we should have had the lode again in the shaft, and doubtless, productive; from default, however, in payment of calls, and the costs falling on a few holders, the mine was given up.—W. HEATH: *Bridestowe, July* 31.

JUDGMENT IN TIN MINING—EAST BIRCH TOR AND TINCROFT.

SIR,—From the perusal of a letter under this head in last week's Journal, I cannot help thinking it tends, in a great measure, to the aspersion of my character. The writer, indeed, would appear to be but acting for some individual, in coming forward in an attack which he was not bold enough to venture on himself. From Mr. W. Heath's own admission, his report has been distorted—that the real facts are actually misrepresented. It may be said the *Mining Journal* should not be occupied by debates on the merits or demerits of individuals; the present case, however, I consider an exception, and one that demands some notice—I, therefore, trust you will not decline giving publicity to the few observations I shall make; and feel confident they will meet with justice at your hands.

In the first place, I do not know Mr. Wm. Heath, nor have I ever corresponded with him; yet he insinuates I have said what was untrue relative to the quantity of tin in the heaps of stuff to which he referred. I now challenge him to prove whether I said there were five cwts. or five thousand cwts. of black tin in the heap. He can only have given his opinion on what I said from information furnished him; let him, then, first prove I have erred, before he speaks of convincing me I have done so. I would advise Mr. Heath, when he makes his next charge, to ascertain its truth previous to sending his remarks to the Journal. As to "paper mining," I am as much averse to it as he can be; I would much rather meet him at Tincroft, or any other mine he may name—I can assure him I am afraid to meet no man, nor to express my opinion of the quality of tin in any mine. I know Poldice, and have assisted in breaking hundreds of tons of tinstuff at Kitty Billins; and should he wish to test my capabilities, let it be in the presence of thinking men, who can form a correct judgment: but Mr. Heath has given an opinion on Tincroft Mine, which I am prepared to confute by facts. I have sunk down upon the backs of five of the lodes eastward, and in no instance did I find the lode split up; and had he taken the trouble to have gone on the other side of the hill, he would have seen water enough in the sett for any dressing or machinery that ever might be required for the mine.

As regards East Birch Tor Mine, there is but one opinion among men of understanding; which is that it would prove a good one if properly worked. I cannot see that the plan proposed by Mr. Heath will in any way improve the condition of the company, and must certainly leave them to judge whether it is the better to adopt Mr. Heath's plan, or the one I suggested to Mr. Saunderson when in London.—JOHN PENROSE: *Moretonhampstead, Aug.* 6.

THE TINCROFT MINING COMPANY.

SIR,—The perusal of the proceedings of the above company, inserted in the Journal of the 19th July, has occasioned my writing this letter. I deeply regret that such men as Mr. Pike, Captain Floyd, and others, should be treated by the Committee of Investigation as they have been. This is not the first instance of the trouble that metropolitan committees have inflicted upon men of high standing in this county; and I can assure all parties whom it may concern, that the purser and manager are held in such este em in this neighbourhood, as well as at the mine, that nothing which the committee may circulate will alter the high opinion which is entertained respecting their honour and integrity, and their qualifications for the post they fill. Better men, probably, could not be selected, and the committee only show their ignorance by causing such a document as their report to be printed. I never knew any good to arise from London committees; and the conduct of the one in question is only another proof of their inutility.—G. JENKIN PHILLIPS: *Camborne, August* 5.

TINCROFT MINING COMPANY.

SIR,—Being considerably interested in this mine, I am desirous of directing the attention of my fellow-shareholders to the position of the company's affairs, with a view to the adoption of some mode of action which may lead to an adjustment of the difficulties in which our property is involved. Having attended the public meeting held on the 17th inst., and having witnessed the mode in which the directors treated the committee's report, I must confess that I have no hope of obtaining from them any satisfactory or straightforward settlement of the difficulties which are pressing heavily upon our property; and unless you agitate the question, and set forth the rights of the proprietors, I fear we shall obtain no substantial redress.

Neither the official attempts at defence at the meeting, or the discussion by the directors' supporters, has at all altered the facts and figures set forth in the committee's report; these facts, like precious diamonds, will ultimately be valued at their full worth. When the directors' statement, "that they hold three-quarters of the mine," is considered, the public will learn, without surprise, that the committee's report has been rejected. The question is now what course ought to be adopted by the committee, and the shareholders who support them? I firmly believe that not one of the directors is prepared to answer a single charge which has been brought against them, individually or collectively. They were, of course, pretty certain (with a majority of shares) of getting rid of the report for a time, but they have not thought over the difficulties of stifling a public inquiry, and have not made any preparations for the next move. Of course, this report in some form or other will again appear at the meetings of the shareholders, and there is no doubt that a very moderate exertion will prevent its again being rejected. The directors, with such an indictment standing against them, cannot keep their ground against a pertinacious determination of the committee and shareholders.

Substantially the property is being worked solely for the directors; it has, as it were, been alienated from the shareholders, and will, in all probability, remain so, unless the proprietors are true to themselves. The mines, if properly managed, will become profitable, and the directors can render them so if they please; but at present they are lucrative only to the executive. After having had all the advantages from the commencement of the undertaking, and when scandal has been attached to their conduct, they will, no doubt, endeavour to give the proprietors some slight interest for shares purchased at 16*l.* and 17*l.* each; but until the present directors and manager are removed, and until there is a good and perfect assurance that the mines are honestly conducted, the public will not consider the Tincroft property as having been rightly and fairly dealt with; and neither charity or justice, logic or fair dealing, will assent to any other proposition. The several gentlemen who addressed the meeting on behalf of the directors seem to have forgotten entirely the nature of the committee's report, and the necessity for a calm and deliberate investigation of the facts it contained. The first speaker acknowledged, and, although acknowledging this, contented himself with some unnecessary complaints of the language in which it was written.

The purser followed something in the same manner; he took pains to show that he could not be accused of indifference, when he offered to supply information. He took the blame of not charging the merchants' bills on himself, and admitted the mine to be in debt 6,000*l.* Now, Sir, the indifference charged against the purser is evidently that of concealing the debts of the company, which he admits, and he proves also the committee's statement of accounts printed in their report. This defence, therefore, is in substance a proof in favour of the committee. Upon its value there cannot, in my judgment, be two opinions.

Mr. Johnson proved another witness as to the concealed debt of 2500*l.*, and followed it by a complaint of hard language. He further admitted the company required 5317*l.*, and upon being pressed closely as to whether he had personally inspected those parts of the mine which were being worked unfairly, he admitted that he had not. Dr. Spurgin had nothing to offer in opposition, but a few generalisms about a love of science, and to hand in the report of Capt. Treweeke. This document does not, in any important particular contradict that of Capt. Richards, and the only portions which give a good account of the mines are set forth problematically.

The gentleman who proposed the adjournment of the meeting, set out with a manifest error; he stated that none of the inferences drawn by the committee could be borne out by facts, when it is quite clear that nothing has been said without figures, documents, and evidence being quoted in support of it. The report of ore and machinery made by Capt. Richards has never been contradicted by any competent authority. There was nothing said about either, as to value, in Captain Treweeke's report, and Mr. Johnson's estimate is not that of a practical man. The mines were not proved to have been worked "judiciously." They had been, on the contrary, overworked. The eyes were being picked out, and Mr. Johnson could not, on his personal authority, deny the fact. The books this gentleman stated had been correctly kept, and the accounts had not been cooked. How, then, is it that at the meeting held on 30th April last the accounts showed a balance of 348*l.* 17s. 6d. only against the company, when on all hands the mine is admitted to be in debt at least 6457*l.* 12s. 9d.? How was it that 2600*l.* and upwards had been erroneously carried to the company's credit? How was it that when the mines were really in debt the red book statement was made to show a credit of 3638*l.* 16s. 5d., upon which a dividend of 10s. 6d. per share was declared? Surely in all these facts there must have been something very like cooking, and if the gentleman who asserts the contrary will be kind enough to meet these facts and explain his explanation, it will very likely show us something novel in the art of book-keeping; but at present we have only assertions against a most lucid array of facts and figures, and those assertions couched in language upon the strength of which the committee might fairly complain. But, Sir, beyond all this, and in so serious a question of property, no man is entitled to substitute vague assertion for facts or argument, or publicly announced *intentions* of correct management and fair dealing for the execution thereof. Neither have the directors or their supporters a right to demand of the shareholders the acceptance of the resolution proposed, or approbation for designs which no one ever heard of until their conduct was impugned, in consequence of improper acts.

The committee, in bringing to public gaze the whole affair, have deserved well of their fellow-shareholders, and the inferences they have drawn from the evidence before them are fair and reasonable inferences; but in the laborious task which they have set themselves of cleansing the Augean stable of directional mismanagement, they must expect to be met with opposition from those who pay more regard to their own private interests and fancies than to honour and rectitude. Of course the committee's motives will be impugned, and their regard for the property deprecated by the corrupt, the weak, and the timid. These remarks are necessary, because there has been an attempt to convert the language of the report into a cause of sympathy for the directors, into a screen and cloak for the monstrous statement of facts rendered to the shareholders by the committee's report, and against that attempt it is your duty to warn and protect the public.

The real questions which this report has raised, and which must and shall be discussed, and which the shareholders will have to reconsider, are—

1. That the mine is in debt 6457*l.* 12s. 9d. to the end of March last. This statement of accounts is admitted to be correct by all parties, and, therefore, some course must immediately be adopted to relieve the company from the pressure of this debt, with its attendant evils; and although the proposition of raising a cash balance to meet the contingencies of the mines may admit of difference of opinion, there cannot be any question of the safety of such an arrangement; at all events, the principle ought to be discussed, and the proposition determined.

2. The tin returns have been anticipated. This fact is illustrated and confirmed by the purser in his letter to the committee, printed at page 7 of the report. Capt. Richards also states the same circumstance, printed at page 17. The directors admit the fact in their last annual account. Their supporter, Mr. Field, also confirms the circumstance, and, therefore, the truth of it is established. No one doubts it; and the only question remaining for settlement is the means of preventing it in future.

3. The merchants' bills have been concealed to the amount of 2402*l.* 4s. 11d. In like manner this is admitted by the purser at page 7 of the committee's report. The directors subscribe to the fact, and no one disputes it. Now, it is surely necessary to ascertain whether this is all the concealed debt. Where there has been so much deception, there is just cause for suspicion; and, therefore, this matter calls for further investigation.

4. The committee take strong and proper objection to the system of loans and long credit—to the abolition of the protecting fund—to supplying other companies with goods, and giving four years' credit—to the admixture of offices—to the large sum charged for directors of an insolvent property—to the expense and loss occasioned by the office of London manager, and the abuses which arise under the system—to improper charges for petty disbursements—to the system of auditing accounts—to the bad system of accounts, which they properly and truly assert have been made to show any result, as instanced by the last statement of account presented by the directors, where the balance was said to be only 348*l.* 17s. 6d. to the declaration of fictitious dividends, &c.

Surely, all these facts, supported by documentary evidence, by figures and admissions furnished by the company's servants, are entitled to full confidence, and demand instant consideration from the shareholders and directors; and yet all this grave and well-attested statement is attempted to be met by simple assertions and an unmeaning resolution.

5. The value of the property, if any reliance is to be placed on Capt. Richards's report, has been damaged by improper management. This fact is boldy set forth at page 19, and reiterated at page 20. The value of the ore discovered has been grossly exaggerated; for, after paying all expenses, there is not 20,000*l.* left to the shareholders.

Surely this report—made, I understand, after the most careful inspection and long deliberation—is entitled to calm discussion. Surely it is not to be dismissed upon the word of an interested supporter of the directors, who knows nothing either practically or theoretically of mining. The inferences which the committee have drawn from the facts before them are, as I have before said, fair and just ones.

The language in which their report is written is forceable, but strictly appropriate. The strength and nature of the charges required them to call the several acts of misconduct by their proper names; and it would have been much more manly and straightforward of the directors to have met the charges by explanation, if possible, rather than by taking puerile objections to the language in which they were couched. It would, however, be tedious and painful to pursue this subject further at present. Enough has been done and said, at least, to show that the committee's report is true; and there is every reason to believe that there is infinitely more mismanagement unexposed, and upon a fitting opportunity I will address you again on the subject of Tincroft Mines.—VERITAS: *London, Aug.* 8.

[In all discussions on mining affairs, we have ever endeavoured to act an impartial part, and give both parties fair play. "Amor Fraternas," in last week's Journal, took one view of the Tincroft committee's report; "Veritas," in the above communication, takes a different one; and the absence of objectionable language, and appearing so plain a representation of the writer's convictions, we thought demanded its insertion. It was the somewhat intemperate and unusually personal language in which the report was worded which caused its rejection, and prevented that fair discussion on its facts and merits which, doubtless, would have ensued; and we have no doubt the directors will still be able to explain every apparent discrepancy to the satisfaction of the shareholders, and that under their management the Tincroft Mine, having paid off its debt without a call, will be brought into a profitable and permanent position.]

MENDIP HILLS MINE.

SIR,—May I trouble you to pull the ears of your printer's devil? He MUST certainly have made a grand mistake. What? The directors of Mendip Hills forego all remuneration for their services! Mr. Stainsby *cheerfully* consent to the arrangement as regards the London management!! Why, Sir, after this I shall be expecting to find Mr. Pen-er writing his own (!) letters, or Mr. Puffkin forgetting to blow his own trumpet. No one can deny that the directors of Mendip Hills have had a fair picking out of the concern; still the news in your last is too good to be true.

When a hungry and ferocious dog, after a few nibbles at my calf, suddenly becomes gracious and fawning, I feel convinced that, by throwing me off my guard, he hopes to reconnoitre at his leisure, and so find the best part of the aforesaid calf whereupon to make an effectual grab; and there is more in the condescension of the directors of the Mendip Hills than meets the eye. The accounts presented to the meeting, with the remarks upon them in the directors' report, are the most extraordinary I ever read. Let us examine them—debits (including 627*l.* 2s. 5d. for one year and a quarter's management), 7723*l.* 2s. 8d.; credits, including lead sold, 4564*l.* 6s. 1d.=5814*l.* 6s. 1d.: leaving the company actually in debt, 1908*l.* 16s. 7d. Against this, lead stock in hand, 1600*l.*: leaving, after it is realised, 308*l.* 16s. 7d. debt. Now, then, for a passage in the directors' report, which, after reciting the statement of accounts as I have given it above, goes on to say, the directors propose at an early meeting of the board to declare a dividend of 4s. per share (1000*l.*), realised fairly from the *earnings of the company*—that is, the earnings of a company 1443*l.* 6s. 1d. in debt 15 months ago; and, notwithstanding a call of 1250*l.* made in the interim, now in debt 1908*l.* 16s. 7d., showing a position, as it regards actual returns from the works placed against expenditure, worse by 1715*l.* 9s. 11d. in a year and a quarter. Yet the directors propose a dividend out of "*fair earnings.*" It is true a great part of the expenditure has been for heavy work—such as plant, &c.; but the simple question is, how are the directors to pay a dividend of 1000*l.* out of a debt of 1908*l.* 16s. 7d.? Another paragraph in the report, which suggested to me the idea of the hungry dog, may also suggest to reflective minds the solution of the problem, and show the ingenuity of certain managers. After stating the intention to declare the dividend, the report further says—"And they (the directors) will also consider the best mode of discharging the engagements of this company, and thus closing the capital account." Here we have it plain enough—Lead to be sold, 1600*l.*; deduct dividend, 1000*l.*: leaves 600*l.* to pay necessary costs in advance. The debt, 1908*l.* 16s. 7d., must be paid by *fresh capital* on new shares, *or by a call*—as thus, dividend 4s. per share; call, 7s. per share: balance in favour of the office and against shareholders, 3s. per share. Clever fellows these!

London, July 28. ARGUS.

CAMBORNE CONSOLS.

SIR,—With reference to the letter of "Enquirer" (Dorset), I beg to say that he or any other party, being *bonâ fide* shareholders, may at all times obtain every information as to the prospects and progress of this mine by addressing me, or on application at the offices of the company. The writer refers to the management, which he has put in italics; with regard to which, I would simply observe that it would not be easy to mismanage a mine like this, which, from its position, requires no machinery, and but little more than manual labour. If, in this respect, there is anything to complain of, the fault is with the body of shareholders themselves, not the party conducting it.

"Enquirer" has truly said "the sett is a good and valuable one;" and I may be permitted to add that it only requires a spirited prosecution and trifling further outlay to make it a lasting and highly-profitable undertaking. Our prospects are cheering, and we are, perhaps, raising sufficient ore to about meet the cost upon the present scale of working. F. DANIELLS.

Camborne Consols, August 6.

CAMBORNE CONSOLS.

SIR,—In answer to the letter, inserted in your last Journal, from "Enquirer," I beg to inform him that a special general meeting of the shareholders will be called, chiefly for the purpose of considering the practicability of adopting the Cost-book System for the government of the proprietary, as soon as a certain agreement with the Stray Park Mine adventurers shall be completed. One part of the said agreement was signed by the directors of Camborne Consols and sent to Camborne; and the adventurers of Stray Park Mines passed a resolution, as far back as the 13th of June last, authorising their committee to execute the counterpart; but from some unaccountable cause, or neglect, the committee have not yet complied with the said resolution, although no pains have been spared by the managers of Stray Park and Camborne Consols Mines to have this tedious subject brought to a speedy settlement. The shares in this mine being held as *bonâ fide* investments, it is deemed desirable to avoid the appearance of working the mining share market by publishing the reports, which, however, I am happy to say, are most satisfactory; but any registered shareholder may obtain further information by applying either to the manager of the mines or to me. H. L. T. VON USTER, *Secretary.*

New Bridge-street, Aug. 8.

EAST WHEAL MARGARET, NEAR HAYLE, CORNWALL.

SIR,—Being perfectly satisfied that you will be no less ready to publish than I am delighted to send any good news from this new speculation, I avail myself of the earliest opportunity to inform you of our prospects and progress. We have reached the bottom of the old men's workings, on a lode called Cargenvin's, where we found a greater quantity of water than could possibly be drawn up from an increased depth by the old workers' water-power, which to us was not a bad omen, inasmuch as we find that the whole of the lode, as far as it had been followed, has been taken away—viz., about 24 fms. Below this depth we commenced sinking about a week since, and find the lode to be about 2 ft. wide, which will turn out about 80 barrows of tinstuff, averaging from 10s. to 12s. per barrow (say from 40*l.* to 45*l.* per fm.), far exceeding the most sanguine expectations. The sinking of this shaft alone will pay the entire cost of the mine, provided it continues. Our prospects at Wheal Mirth are also very

flattering; the lode in this shaft is about 10 in. wide, averaging from 7s. to 8s. per barrow. The engine-shaft has been sunk about 6 fms. on the caunter lode, which, generally speaking, has been small, but of a saving quality. We do not calculate on anything very important on this lode until it meets Tregoning's, underlaying towards it—say, 16 to 20 fms. deeper. On Tregoning's lode we are cutting down two shafts, or making them sufficiently large to follow below the old men's workings on said lode. Altogether, we are highly gratified with our good success at so early a period of operations, so much so that not a small desire has been manifested by our neighbours to become shareholders in this concern, shares in which have advanced to 4*l.* 10s. and 5*l.* each.

Usy Lelant, Aug. 4. THOMAS TREWEEKE, Jun.

WHEAL HAMLYN.

SIR,—Mr. Phillips having acknowledged that the mine I called at is Wheal Hamlyn, it needs no further comment from me. I have already said I will stake my mining knowledge on the result. Not wishing to injure the shareholders by depreciating the value of the shares, he, for their protection, should call in some respectable practical agent, such as Capt. Lean, of Callington; Capt. Puckey, of Fowey Consols; Capt. Paull, of Tavistock, or any other competent men, and let him (the agent) say if he has any lode at all in the mine, and whether his native copper is anything more than coloured quartz or lime. The agent called in can test it on the spot, by carefully bruising it on a shovel with water, and if quartz or lime they will all swim off in solution; if native copper, it will plate and remain.

I shall pass the lime quarry in a week or two, when I would gladly meet any respectable person he or the shareholders may appoint, and give the mine a fair report. Without this is complied with, I shall pass any further remark unnoticed, only watching the result.—N. ENNOR: *Wiveliscombe, August* 7.

WHEAL HAMLYN.

SIR,—Perhaps your able correspondent, Capt. Ennor, would not take it amiss were I to ask him the reason of his disliking the strata in this sett. It is true I never was on the mine, but I understood that it was situated a fair distance from granite; and while I agree with Capt. Ennor as to his remarks—that no rich copper mines can be expected six miles from granite—yet I am at a loss to know why Nature does not deposit her riches in the neighbourhood or vicinity of the Okehampton granite hills, as well as in Cornwall. I will admit, with Capt. Ennor, that the surface rock in many instances is hard, and by no means metalliferous in the Okehampton district; but, then, looking at the clay-slate lying on the granite, if I mistake not, it has a northern dip, as we find generally in the Gwennap district; therefore those hard layers or floors of grauwacke, hornblende, and other hard capel rocks that have a southern dip, may continue but a few fathoms in depth, because, notwithstanding the hard cap of rock at the surface, the lodes in some instances appear well-defined; and, although not rich in mineral near the surface in the uncongenial rock, yet it is no marvel if they make riches in depth. Capt. Ennor reasons very fairly when he states that he could see nothing at surface to warrant anything satisfactory. True, Capt. Ennor, I judge you to be a practical and thinking miner, and for many years a hard-working pick and gadman, and, of course, in your youthful days, have been a tributer, if I mistake not, in Holmbush Mine, near Callington, and in the mines about Calstock.

Now, Mr. Ennor, I would ask, when you have taken a pitch from 2s. 6d. to 5s. in 1*l.*, you commenced working on the course of ore, where you might make your wages from 10*l.* to 20*l.* per month, but, after working a few days, all at once your lode takes horse, or a hard range of rock, invisible to you at the commencement of your take, has broken your lode to pieces, and all your hopes of doing well are blasted. You throw down your pick and gad, and call in your neighbouring tributer, and gladly glean from him his advice how to proceed in future in the working of the pitch. You can then point out with your finger to your comrade the cause that disordered the lode. The hardworking, thinking, and industrious tributer will begin to calculate, judging from analogy, how far he has to rise, sink, or drive to get through this hard unexpected rock. If he finds that the range is too thick to drive or sink through, he immediately deserts his pitch altogether, or tries some parts of his limited ground, and thus continues until the end of his take; and instead of raising his 50 tons of copper, according to the calculation at the first outset, he only brings to surface 3 or 4 tons, or perhaps not half that quantity; but had this hard range been visible, of course the tributer would not have taken his pitch at such low tribute.

I might write a great deal on this subject; but as my object is simply to point out to Capt. Ennor the danger of condemning lodes running within a fair distance to granite, I shall confine myself simply to the above district. Now, the lodes in this district are strong, and carry with them the properties of copper in the east and west courses; and, so far as I am a judge, the north and south courses are equally so for lead; and I am inclined to believe that, if some of the lodes in the locality were proved to a fair depth, the results would be satisfactory.

I never yet saw either in Cornwall or Devon the clay-slate lying on the granite undercut by any other cap of rock, hard as it may be; in fact, I think favourably of those caps; and where lodes are found to struggle their passage through, it evidently show that the stratum underneath is the regular food to nourish and strengthen them in mineral.

Now, Capt. Ennor, the reason of my writing you in reference to a tributer taking a pitch on tribute with a good course of ore in sight—have you not seen lodes open in a beautiful stratum of ground at surface, and ore quickly sent to market, worth from 20*l.* to 25*l.* per ton, and the lode continuing good for a few fathoms in depth, shares selling at a high premium, and all at once the shaft sinking, or levels driving, gets into hard strata, and the lodes broken in the like manner we have both experienced in our tribute pitches, only to a greater extent? I should not like to condemn a mine where I see those samples of rich and brilliant ore broken so near the surface, but very frequently it is cut off by an invisible range running between the lode and clay-slate lying on the granite; but where the hard cap is found for a few fathoms deep, lying on more soft strata near the granite, the ore at surface is found more inferior in quality, chiefly of mundic and peach, hardly worth saving. Now, those are the lodes that are found in depth to be of great value; and so far as I am a judge of clay-slate, I am not at all timid in seeing hard caps at surface, with the provision that the clay-slate is congenial near the granite, and the lodes running within a fair distance thereof. My object in writing this letter is to gain instruction; and although I have been all my days a miner, I must confess I can daily discover my want of knowledge, when comparing my weak ideas to the wonderful works of Nature, open to my view in the subterraneous caverns of the earth; and I feel assured that every man who admires the earth's natural laws will never think himself too wise to be taught.—J. SPARGO: *Great Sheba Mine, August* 7.

ON DEEP TIN MINES.

SIR,—The letter from "W. A. D.," on Tin Lodes, in last Saturday's Journal appears to have originated from an old source, that I had done with for the present; but, seeing my remarks so contorted as to quite alter the meaning, I will now endeavour to set those right who appear to have misunderstood my words, either intentionally or otherwise; and further remark that in all my correspondence I clearly stated that tin and copper lodes ran nearly parallel with the granite ridge, which is in about an east and west direction, and no valuable tin or copper mine was found above two miles north or south of the known bases of granite, which is dropped without proof of a single precedent to the contrary. If "W. A. D." refers to my letters he will also find that I requested them to point out 20 tin mines paying dividends from their resources below the 100 fm. level. In my communication in the Journal of the 21st June, I stated that there were but six deep tin mines in the Dividend List, and these not authenticated as paying from their resources below the 100 fm. level, which showed but little in favour of deep tin mines, and these are all in the western district, where many of the north and south lodes are known to have been very productive in tin. I also remarked that I thought all the six to be in granite, and chiefly in these north and south lodes, *particularly remarking that I was not certain on this point.* How "W. A. D." could put his construction on it I am at a loss to account for, and shall pass over all such remarks in future. If "W. A. D." will get out of the bush, and point out a mine where in my remarks I have made any glaring error, I will meet him on the spot: if he can point out facts to convince me, I will bow with all submission; but without precedents proved in this way, I shall claim the merits of substantiating that tin in lodes is not found in the two western counties to extend above two miles north or south of granite, nor copper to remunerate the adventurers to the amount of 10,000*l.*, or deep mines to pay as a whole. It would certainly be very singular if no mines could be found with a short shoot of a branch or vein of tin extending down beyond this point, but the grand question is, will they pay? It is a remarkable fact that not a single tin mine east of Charlestown Consols, St. Austell, ever paid to this depth.

A deal has been said of late as to the formation of mineral veins. I would again remind your readers that I have hitherto evaded the question, with a view of drawing from some of your talented correspondents their opinion as to the time of their formation, or whether they admit that they are working under a similar law to vegetation, and still growing; we could then pin them to a point to be met on. There are many well-educated writers who attempt to tell us how the lodes were formed, and give us a long history of their geological knowledge, and the extraordinary cracking of the earth to make way for lodes, although they never had practice enough to know the earth contained many classes of what they call cracks, and that a certain portion of them are filled with metallic substances, and others with clay or earth; and there are other portions, though very open, that never did, nor never will, fill. Will they tell us which these are, and about their direction, and if there is not a natural law that governs them, and prevents some from filling? I have given my views on the strata of rocks adjoining lodes, showing them to be mineralised, and their effect, when meeting lodes in favourable directions, which is not denied by any well-informed practical man. As a further proof, I am ready to pay half the expenses, with any one who disputes it, for analysing a fair sample of rock taken from near any productive copper lode, he allowing me to see the lode and rock, and name the side it is to be taken from. I go into Cornwall shortly, and shall be most happy to meet any well-informed person on these subjects, but have not time to reply to such letters as have of late appeared in your Journal.

Wiveliscombe, August 7. N. ENNOR.

THE GRANITE QUESTION.

SIR,—Your Journal of the 26th July not having reached me, I had not till lately an opportunity of seeing the letter of "W. A. D." on this question. That gentleman has certainly a very happy and convenient method of drawing his inferences. Simply because Capt. Miners reports that in North Buller Mine they have an elvan course, which miners call granite, he seems very coolly to settle it down as a matter of complete necessity that in the Perran St. George Mines should be found the same circumstance, and that I should make the same error. Perhaps, Sir, "W. A. D." did not intend me this great honour. However, taking the deed for the intention, he will please permit me to offer him my best thanks. The array of evidence which "W. A. D." brings to bear on this question is certainly very imposing. Such authorities in geological matters as Sir Henry De la Beche, Prof. Austed, W. J. Henwood, and others, are, I acknowledge, not to be disregarded. But facts are such stubborn things, that even they are unable to controvert them. However, facts now-a-days do not appear to depend on themselves for their truthfulness, but on how and by whom they are spoken. *O tempora, O mores!*

I do not ask "W. A. D." to come all the way from Lambeth to see for himself, nor do I ask him to say another word about a matter which he does not appear to understand much better than other people; but I do still expect that "Argus" will pay us a visit. Like the watchman for the morning, have I been waiting his long-promised appearance; but, lo! he has not come.

"He that fights and runs away,
May live to fight another day."

Cheapside, Aug. 6. THOMAS PILL.

ANGLO-CALIFORNIAN MINING COMPANY.

SIR,—My attention has been drawn to two advertisements concerning this company, which appeared in your last week's Journal. In the previous Number Messrs. Coombe and Nickol had informed the world that the managing director, Mr. Luke Williams, had been "removed," at the same time offering further and fresh shares for sale. The *quasi*-director, promoter, *cum multis aliis*, last week tells us that it is necessary to reconstitute the board, and that parties have been misconducting themselves, calling meetings, &c. Under this Mr. Goodman, the secretary *pro tem.*, offers, on behalf of the board, a full detail of the reasons why Mr. Luke Williams has been dismissed, at the same time objecting to do it publicly. Mr. Goodman must be perfectly aware, from the manner in which the company was formed, now nearly two years since, that the shareholders lie scattered in the different provinces of the kingdom, and are, from their isolated position, incapable of any combination for the general good. Are we to appoint delegates in the several counties to proceed to London; or are we to receive detailed and garbled statements from both parties, so that we shall be incapable of judging who is guilty? or are the remaining sums which the "yokels" subscribed to be frittered away in law expenses, until not a vestige remains? When we first embarked in this speculation we were told we had land, houses, &c., in California; and last year we had a baronet as chairman, and a knight as superintendent. Where are Mr. Williams's late colleagues, and what is he doing if he does not, *if he can*, quickly justify his silence, and candidly inform us of our position, and the reason why such tissues of misrepresentations were previously put forward, with the authority of his name? Nothing but the clearest and most open statement will now satisfy those who sign themselves, as unfortunately I do—A SHAREHOLDER: *Penrith, Aug.* 4.

BRAICH GOCH SLATE AND SLAB QUARRY COMPANY.—This property forms part of the far-famed bands of the Abercorris district, east of Cader Idris mountain range, in the county of Merioneth, in the principality of Wales, seven miles distant from the shipping port of Aberdovey, and is held on lease for an unexpired term of 43 years, at 60*l.* rental, increasing 10*l.* every seven years, or 1-10th royalty: upwards of 8000*l.* have been expended in driving levels, and forming slate floors at five different galleries of various altitudes, erecting engine-house, water-wheels, and other necessary machinery, and the present proprietors being desirous of extending the operations by increased power of machinery, commensurate with the capabilities of the property, propose creating a capital for the purpose, by dividing the shares into 3500, at 4*l.* each, and taking 1000*l.* in cash, with 4800*l.* in shares, leaving 2300 to be disposed of, which will realise 8200*l.* available for the extended operations contemplated. St. Pierre Foley, C.E., has recently inspected the property, and gives a highly favourable report, asserting that "no quarries could offer more favourable capabilities for making vast returns on a scale of moderate expenditure, nor present more legitimate resources for safe and profitable investment of capital." He calculates upon an expenditure of 7034*l.* realising a profit of 6518*l.* by the labour of 100 men for one year, and shows that during the last three years, on a very reduced scale of operations, a profit of 49 per cent. was made. He concludes his lucid report by stating that 5000*l.* would extend the openings upon the range of veins, so as to give room to a double number of men to work with effect, and for the required additional machinery and other auxiliaries. The quarries having been already proved, the concern appears to be both a solid and *bonâ fide* channel for investment, certain of realising very handsome returns.

START BAY SLATE QUARRY is situate on the cliff, in the parish of Stokenham, Devonshire, extending over about eight acres of ground, two miles east of the Start Lighthouse, wherein there were extensive workings at a remote period. The quality of the slate is of a most superior kind in texture, and it splits to any thickness that may be required; the colour is uniformly a bright blue, adapted for chimney pieces and other ornamental work, being beautifully veined; it is also adapted for roofing, tomb and head stones, steps, cooping, flooring, &c. Vessels can lie off the quarry, and the slate be shipped for 8d. per ton, with an unlimited space of land upon the beach for depositing large quantities of it, free of charge. A double tramway might be put for a small outlay, and save all expense of carriage and horse labour, by aid of which the rubbish could be thrown over the cliff. The quarry might be worked to a great depth by an adit driven in from the beach, which would cost about 200*l.*, and then be able to sell slate cheaper than most other quarries. The present proprietors have secured the lease for 21 years, from Midsummer, 1850, at 1-20th dues, for 1500*l.*, part of which they are willing to take up in shares. The manager's house and workmen's cottages (newly built on a term for 70 years) are available assets for 500*l.*, the proprietors, therefore, reserve to themselves 500 shares as a compensation for their interest. The capital is to be 8000*l.*, in 4000 shares of 2*l.* each, 1*l.* to be paid on allotment, and 1*l.* within three months.

SILVER BROOK AND WEST BEAM UNITED MINES.—These mines are situate in the parishes of Ilsington and Ashburton, Devonshire, and are held for 21 years, the former at 1-16th, the latter at 1-15th dues (40*l.* rental per annum for buildings), and are about two miles apart. The former is an ancient silver-lead mine, three-fourths of a mile long, and about half a mile wide, in a highly mineralised district, easily approached by water carriage. One of the lodes is from 18 to 20 ft. big, and the caunter lode from 3 to 4 ft. Other lodes run through the sett, but have not yet been opened upon. Large quantities of ore have been taken away in former times at and above the adit level: the ancient miners could not avail themselves of the riches below, being incapable of drawing out the water, to do which a steam-engine will now be necessary, the estimated cost of which, and to place the mine in a productive state, is 2000*l.* The mine was inspected by Mr. Adam Murray, jun., on the 1st of May last, who reports it to be in a grey killas, of an easy fracture, running in east and west courses, and dipping south, containing all the symptoms of considerable deposits of ore, when a reasonable depth is attained. West Beam is a tin and copper mine, two miles long and half a mile wide, directly west of Owlacombe and Wheal Union tin mines, the lodes of which pass through the sett, which is justly celebrated for tin. Five tin lodes are known to be within the limits, and one of copper, but only one of the former has been wrought to the depth of 40 fathoms, by means of water-power only, from whence 10,600*l.* worth was sold by the late company in 1846 and 1847, the tin being of the richest quality, and realising the highest market price. To raise a capital, 7600 shares are to be issued, at 1*l.* each; the present proprietors to have 3100*l.* (the greater part of which will be taken by them in shares) for the purchase of the mines, wheels, pumps, and machinery; the costs to be discharged monthly, and a general meeting of shareholders to be held bi-monthly. The management is to be vested in a London committee of five shareholders, assisted by a local committee of the like number.

SOURTON CONSOLS.—This sett is situate in the parish of Sourton, Devon, the lodes being parallel with those of Great Wheal Friendship, from which 1,132,662*l.* of copper ore has been raised, leaving a clear profit of 286,574*l.*, and is in the same strata, bordering on the granite formation. There are several large and well-defined lodes in the sett, the principal one being 9 ft. wide, producing rich gossan, with yellow and grey ore of the same character as the Devon Great Consols, as testified in the report of Mr. Jehu Hitchins, a sufficient guarantee of the nature and value of the property, whose recommendations it is intended at once to carry out. Its geological position, an abundant supply of water, the facilities of carriage, and the generally favourable prospects which the sett commands, renders the adventure of more than ordinary promise: it is divided into 1024 shares, 512 of which are taken in the immediate neighbourhood, the remainder to be issued to the public at 2*l.* 10s. each, which includes a call of 10s. already made on the 1024 shares for working expenses. The engine-shaft is down 18 fms., calculated to take the lode at 35. A water-wheel is to be immediately erected. The sett is secured for an unexpired period of 15 years, at 1-15th dues.—[Since writing the above, we have received the most favourable reports from Capts. John Lean and W. Curnow.]

WEST CAMBORNE MINING COMPANY.—A prospectus of this undertaking is now submitted to the public. The capital is to be provided by the issue of 5000 shares, 3000 of which are to be distributed among the public, on payment of 1*l.* each, and be subject to further calls to the extent of 1*l.* per share; the remainder 2000 shares to go to the parties now holding the leases, which are at 1-18th dues, for 21 years unexpired, from the Rev. Hender Molesworth St. Aubyn. The ground comprising this sett is in Camborne, one of the best districts for copper mines, and is in similar strata to Condurrow, South Frances, West, North, and Wheal Basset, Wheal Grenville, and other valuable and productive mines, close adjoining. The lodes are numerous, and are intersected by several slides and cross-courses, in addition to which a fine elvan course runs close to the junction of killas and granite—all important adjuncts, thought most favourably of by practical miners. The prospectus contains the names of several influential parties, who are well known to the mining community, and contains some statistical information as to costs and the profits derived from the adjoining mines, the market value of their shares, and other interesting particulars, and refers parties to the office of the company (George-yard, Lombard-street) for further information, and where an early application for the shares remaining undisposed of must be made.

PROFITS OF THE TELEGRAPH IN AMERICA.—The receipts of the Pittsburgh, Cincinnati, and Louisville Telegraph Company, during the year 1850, amounted to $73,278. The nett profit to stockholders was $13,662, from which three quarterly dividends of 3 per cent. were declared.

A Compendium of British Mining.

BY J. Y. WATSON, ESQ., F.G.S.

EAST WHEAL ROSE LEAD MINE,

IN THE PARISH OF NEWLYN.

Had I, at the commencement of this work, placed the mines according to the position in which they stand in regard to profits at the present day, East Wheal Rose would have been first in the list; and the reason the account has been so long delayed is, I had hoped to obtain the exact returns of this mine from the purser, but am now* informed the labour would be too great to get me what I require; I am, therefore, compelled to give the statistics of the mine from figures obtained when on the spot in 1845, and from published documents since made.

This mine is in the parish of Newlyn, and the sett two miles long on the course of the lodes, and one and a half from east to west. Held on lease for 21 years (more than half expired), at 1-15th dues. Lords—C. H. T. Hawkins, Esq., and the Bishop of Exeter. In 128 shares, 50*l.* per share paid; market value, 500*l.* E. Michell, Esq., Truro, purser; agent at the mine, Capt. J. Middleton. The mine is situate between two hills, the lodes running north and south along the bottom of the valley; the engines (six in number), and the shafts (16 in number), being principally placed on the slope of the hill. Originally worked on east and west lodes, the mine was for years wretchedly poor; and about the year 1830 was about to be abandoned; when on squaring up accounts 200*l.* were found to remain in hand, and it was resolved (so the story goes) to spend it in driving a cross-cut, and in a few fathoms a rich lode running north and south was discovered. The original outlay by the shareholders was 50*l.* per share, or 6400*l.*; and up to 1845 the clear profits divided among the shareholders were about 150,000*l.* In 1846, the profits were 30,726*l.*; in 1847, 34,560*l.*; in 1848, 25,500*l.*; in 1849, 17,920*l.*; in 1850, 16,000*l.*; to this time in 1851, 7680*l.*—making altogether about 282,386*l.*; to yield which upwards of 600,000*l.* worth of lead must have been returned. During some years the profits were 50,000*l.* per annum. The machinery is valued at 35,000*l.* About 1000 persons are employed; the monthly cost is about 3000*l.*, and the present profits about 2000*l.* per month. The deepest level is the 120, and which is said to be looking well. The lode is remarkably soft, and resembles in many places quicksand, and the levels require to be closely boarded up to prevent the lead being washed away. Herein lies the expense and the danger of the mine; the quantity of timber used is enormous, and the expense for this article must be many thousands a year. The lead raised is not rich for silver, but yields from 12*l.* to 14*l.* per ton; the value of the lodes being about half a ton per fathom. Several shares are held in London, but by far the greater number in Cornwall. An old miner held 14 shares, and when he died they were almost worthless—the widow however received near 20,000*l.* in dividends, and the shares are still paying between 3000*l.* and 4000*l.* a year. One of the late directors of the Bank of England, some years since, took three shares for a bad debt, and threw them aside as of no value; when, after a time, they turned up "trumps," and paid him 1000*l.* per share and upwards in dividends alone. Such are a few of the "romances of mining."

To the north of East Rose, a few years since, North Rose was worked, principally by a London party, and a great loss sustained, and the mine eventually was sold to the East Rose party for 4000*l.*, and now forms a part of their sett, as also does Oxnam's Land, the Truro Charities, and Cargoll; one-fourth of the latter being retained by the Bishop of Exeter.

Further north is METHA MINE, still worked by a London company, who have pretty deeply sunk their shaft and their—money. In 1845 it appeared to me, and I published it at the time, that the East Rose lode did not pass in the direction of Metha.

Beyond Metha is WHEAL ACLAND, a large and, one would think, most promising sett. The operations, however, are very limited; the agents wisely waiting to see the actual run of the lode before going to any large outlay. Whether the lode goes through Metha, Rickard's Rose (a nice little sett), or any other, it must find its way into Acland.

* This was written in 1848.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—Field's engine-shaft will, at the end of the present week, be down to the 90, when we intend driving north to ascertain the width of the lodes. The lode in the 80 east is from 7 to 8 ft. wide; the north part from 3 to 4 feet wide, good for copper ore, worth 70*l.* per fm.; the south part of the lode looking very promising. The lode in No. 3 winze is from 3 to 4 ft. wide, nearly all solid copper ore, worth about 100*l.* per fm. The lode in Wyld's shaft, under the 70, is 3 ft. wide, worth for copper ore 20*l.* per fm.; the lode here is fast improving.

ALLT-Y-CRIB.—This week 50 tons have been sampled. Advices, dated August 8, state that some excellent ore has been discovered in Llwynadda, the western part of the mine, in the adits approaching the eastern workings from the western side of the hill, and the work is progressing steadily for unwatering the bottom of the old mine. The ore ground generally was as good as usual.

BARGALLY.—We have made a little better progress in driving the adit level this week. We have now some flookan in the side of the lode, well mixed with ore. In driving the cross-cut we have hit on a very favourable place; the lode is well mixed with ore—much larger pieces than we have seen in any other trial we have made: we have not yet cut through the lode, which is very large.

BAT HOLES.—We have cut Cornish's lode in the engine-shaft, which is 1½ ft. wide, capels and spar, with facings of lead ore, but nothing to value. The 48 north and south, are poor at this time, but expect the north to improve, judging from the level above, where the lode is large. On the California lode we are progressing favourably; our returns for August will exceed July (which is 44 tons). The masons are making good dispatch with building the engine-house for the erection of the winding-engine; the boiler and the fly-wheel are fixed in their places. The engineer is expected here on the 7th inst., to make arrangements about putting the engine together. We have several hundred kibbles of stuff underground, that cannot be raised by horse-power.

BEDFORD UNITED.—In driving east of the engine shaft, in the 115 fm. level, we have had a very hard and troublesome cross-course to contend with, but hope to get clear of it in a few days; it has let down a great deal of water, and although extremely hard and troublesome, is far more kindly and promising than in the higher levels, and is likely to have a very beneficial effect on the lode in deeper levels; in the same level, east of Andrew's winze, the lode is 4 ft. wide, composed of spar and mundic, worth about 2½ tons of ore per fathom; this end is now near the slide, which we expect to cut in the course of the current month. In the 103 fm. level the lode in the eastern end is 4 ft. wide, worth 5 tons per fm.; in Lentern's winze sinking in the bottom of this level the lode is 5 ft. wide, yielding 15 tons of ore per fathom for the length of the winze. In the eastern end of the 90 the lode is 2 ft. wide, good saving work, but not rich. The Tavistock lode in the 47, west of cross-course, is 1½ ft. wide, composed of mundic, spar, black and yellow ore; the same level east is poor. The tribute department is in the same healthy state as usual, and fully adequate to maintain the present returns.

BLACK BURN (ALSTON, CUMBERLAND).—In the low level the beds are dipping the same as last month, with more water, the lime much ridered and harder; on the top of the lime is a small flat, with white clay, mundic, &c. In the forehead, on Scarberry level, we have grey beds, intermixed with donk, in great confusion, with 4 fms. lime in the sole, and we expect to meet with another branch of Inner Gill vein shortly. The level requires close wooding.

BODMIN WHEAL MARY CONSOLS.—The following report was prepared by the purser, Mr. J. W. Welborne, for the bi-monthly meeting of adventurers:—

Bodmin, July 29.—I have carefully inspected the mine throughout, and have the honour to submit to you my report thereon. The shaft is sunk to the back of the 80 fm. level through a pale blue killas, uniformly of the most favourable kind for mineral, a sample of which, broken from the bottom of the shaft in my presence (together with a stone of ore from the gossan in No. 6 lode, broken 14 fms. from the surface, also a stone of ore broken from the same lode in the bottom of the 20 fm. level), I have had this day forwarded to the office in London. I have also sent by mail this day plans of the workings of the mine up to this date, prepared by Capt. Kernick, which will show to you clearly the position and extent of the works hereafter referred to. Levels have been driven to a considerable extent on No. 1 lode, in the 10 fm. level, also at an intermediate distance between the 10 fm. level and the adit. No 1 lode is composed principally of flookan, spar, white iron, in small quantities, stones of white mundic, and a little peach, with a considerable portion of jack interspersed with ore, and is in places much disordered by cross-courses, and a large ironstone course which runs nearly with the lode; a junction appears to have taken place below the adit with some other lode (probably No. 2). At this junction a considerable quantity of copper ore exists, but it is so much mixed with jack that the produce is low; we are now stoping the back of this lode at the level between the 10 and the adit, and breaking a quantity of ore, which with careful dressing will give a fair per centage. No level has been driven to cut No. 1 below the 10, but from the quantity of jack interspersed with ore found in it, coupled with the fine gossan on the back, and its promising appearances altogether, we may reasonably expect this lode to be very productive in depth. The principle part of the ore of good produce which we have sold, has been produced from No. 4 lode in the adit and No. 3 and 4 below, a junction of which takes place between the 10 and the adit: about 4 fms. below adit the lode is very promising, and producing fine strong yellow ore, about 1 to 1½ ton to the fathom of ground, of a produce of 9 per cent. Several pitches are being set upon this lode, which is now drained and ventilated by winzes to the 20 fm. level, the works of the tributers below the 10 fm. level will throw much light upon this lode. No. 5 lode has not been worked upon. No. 6 lode appears to be one of the best, if not the best, yet worked upon; our operations on this are comparatively inconsiderable, and it was only recently that our captain, from tracing the course of a slide, discovered the ore above the adit at the point where the former party left working. Several tons have been raised by us from this place, a sample of which, before referred to, has been forwarded. Nothing fathoms, the lode presenting a very fine appearance; upon rising on the back of this lode from the 20 we find a branch or small lode has fallen in it about 2 fms. above the 20

and it is below this junction that the lode assumes its present appearance; above the junction it is poor: sinking in the bottom of the level on this lode, we are able to break very fine ore, a stone from which place, broken in my presence, has been forwarded to you (as before referred to). The water, however, will not admit of any work being done below the 20, until a cross-cut has been driven in the 30 to intersect and unwater this lode, as from its underlie it will only be about 5 fms. from the shaft in that level; this work will be shortly done, when good results may be expected. The lodes south of our present works it is only intended to cross-cut in the 50. As we have a quantity of ground now open: it is proposed to limit the tutwork to the sinking of the shaft (with all speed), and driving a cross-cut south in the 30 to intersect No. 6 lode, also to continue driving upon No. 3 in the 10, where we have a good orey lode, to keep three men breaking ore, by stoping the back of No. 1 lode, and four or six men to be placed by Captain Kernick, to open such parts of the lodes as in his judgment will open tribute ground. By the mode of working proposed the monthly cost of the mine will be greatly reduced, and I trust our return of ore increased. I have great pleasure in recording that the works of the mine have all been executed in a most workman-like manner, and that no work has been done which was not essential for its development: the engine works beautifully, and is in every respect a credit to its maker, Mr. Thomas. In conclusion, I beg to state that I consider the mine in a highly promising and satisfactory state; the ground continues of the same favourable nature, and the lodes even at these shallow levels are all producing good ore. I find it is the uniform opinion of mining men that we have only to sink to have a rich mine.

BRYN-ARIAN.—The 20 fm. level, driving west from the winze, is still in a large orey lode, producing about 10 cwts. of ore per fm.; the stope in the back of this level, west from engine-shaft, will yield 10 cwts. of ore per fm.; the stope in the back of the same level, west of Hughes's winze, is in a lode 18 ft. wide, producing 1 ton of ore per fm. A stope in the back of the 10 fm. level, west of the shaft, is producing 8 cwts. of ore per fm. The 20 fm. level, south from Hallett's engine shaft, is more promising in appearance than when last reported; the lode is getting more settled, and producing a little ore; in the same level, driving north, we have had a great improvement within the last week, the lode being 5 ft. wide, and at present will yield 1¼ ton of ore per fm.

BUTTERDON.—The engine-shaft is cased and divided down to the bottom of the 40, and the cross-cut is driving towards the lode. The lode in the 30 south is 3 ft. wide, a good orey lode in the bottom of the end, which will pay for working; in the end north it is large and promising, with some spots of lead.

CALSTOCK CONSOLS.—We have now thoroughly ventilated the eastern part of the mine by means of a water-fall; and although this level is in 100 fms. from shaft, I am happy to say so pure is the air that it will enable us to drive in this direction an immense distance further without a shaft. The workings in this direction are on the Wheal Zion lode, at the depth of 60 fms.; this lode in the present end is cut off by a cross-course; the men are now driving south to cut the lode again on the eastern side of cross-course, where we confidently expect a rich lode. The ore from the lode on the western side of cross-course produced by assay 52½ per cent.—this sample was tried by Mr. Jinkin, of Callington. A railroad is also laid down, to bring all the stuff to the whim shaft. If we cut, as anticipated, a rich lode here, there is a large engine-shaft 70 fms. deeper than the present workings, which will directly be made use of, that by a cross-cut of 50 fms. north, will enable us to cut the Wheal Zion lode 130 fms. deep from surface.

CARVANNAL.—The course of ore lately opened on still continues good, worth about 100*l.* per fathom. We have set tribute pitches at 1*s.* in 12, and the mine throughout looks well.

CRAIG-Y-MWYN (LEAD).—In sinking in the end of the cross-cut, from upper level No. 3, very good ore has been found in the parallel vein; and in driving on the cross-cut towards the parallel vein, from lower No. 3 level, good ore and jack was also discovered. About 15 yards deep in the sump, in lower No. 3 level, in driving to the west, good steel ore has been found. The driving on the joint in No. 4 level still continues, and looks well going on to the body of the hill. The water-wheel and crushers will soon be finished, the late wet weather having prevented them from going on, and they were also short of some castings.

DEVON AND COURTENAY.—The sumpmen are getting on with the sinking the engine-shaft as well as can be expected, considering our air, and I hope we shall soon get a change. We are progressing favourably in Carthew's shaft; we have raised some fine stones of ore from it during the past week from some strong branches, which I think will fall into the lode in depth. The stopes in the 60 are not quite so good on the whole as last reported; through this, with bad air, the men have not sent more than half the quantity of stuff to surface they did last week. The ground in the gossan shaft is now hard and troublesome to break, therefore our progress is slow. In the 60 end west the lode is nothing to value at present.

DRAKE WALLS.—Herewith you have the computed quantity of tin sampled yesterday (August 5), No. 1, 14 tons; No. 2, 7 tons. I intend sending down one-half of the tin to the Union House on Saturday; I think it is a better parcel than the last sold. From present prospects I expect the same quantity in the next four weeks, but our western stopes are poor. The end driving east of machine-shaft, in the 60, is looking better than for some time past. We have nine men stoping below the 50, east of machine-shaft, breaking fair quality stuff. The end driving east of footway, in the 50, is not looking so well. The back or stopes are yielding some good work, and looking favourable. We have nine men stoping below the tye level, east of Webb's shaft; they are breaking a great quantity of stuff, but of low quality.

EAST BALLESWIDDEN.—We are now driving east and west of the engine-shaft, and find the lode looking well for tin. We began to sink the new shaft, on the flat lode, under the adit level; we sunk 2 ft. in whole ground, and broke some of the best stones of tin I have ever seen. We then cut through to the old men's workings, which give me a bright prospect of finding a good lode of tin in the bottoms. We are also sinking the old shaft on the flat lode under the adit level, and have a very kindly lode going down. We are driving south on the new lode, and have a good lode of tin going forth in the end. On the whole, our mine never looked better.

EAST CROWNDALE.—The 58, east and west on north lode, is producing good stones of copper. No alterations to notice on the south lode.

EAST SHARP TOR.—The ground in Hitchins's engine-shaft is not quite so favourable for sinking as when last reported on. We hoisted the shears on Saturday last, and hope in the course of a week or eight days to have the capstan completed.

EAST WHEAL GEORGE.—The lode in the 23 fm. level, east of shaft, is rather improved, carrying a branch of ore on the north wall—although small it is very good. The lode in the rise in the back west is large and spotted with ore, but not rich enough to save. The lode in the stopes in the bottom of the 12 west is worth 6*l.* per fm. I expect to sample next week July ores, computed from 14 to 15 tons.

EAST WHEAL RASHLEIGH.—On the 6th inst. we cut a very kindly east and west branch, with spar, mundic, and copper, in continuing the end, about 7 or 8 in. big, underlaying north into the hill, as all the other lodes do cut in this part of the sett. In my opinion, when we sink under the adit, we shall have very productive lodes; from the fact of so many gossan lodes having been discovered since our first commencement, and the favourable character of cross-courses and branches intersecting them, there is little doubt of the speculation being a good one. The present price for driving is 3*l.* 10*s.* per fm., the ground being stiffer than when I wrote my last.

EAST WHEAL RUSSELL.—Since my last report we have been fixing the engine work in Hitchins's shaft, and have raised the collar of the shaft 5 ft., and are quite ready for the engine when it may come. The adit level is communicated with Murchison's shaft. In going through the tunnel we broke copper from three lodes in our sett.

ESGAIR LLEE.—We have cut the wall of the north caunter lode in the cross-cut, south of the deep adit, composed of quartz, mundic, and ore, but as yet we are not through it. The lode in the winze below the 12 is 4 ft. wide, producing good work, and underlaying full 4 ft. in a fm. The lode in the stopes is without alteration, yielding on an average 8 cwts. of ore per fm. We have forked the water, and commenced sinking the engine-shaft.

GARREG.—Since the last meeting a level, 3 fms. below the adit, has been cleared about 75 fms. south of the engine-shaft, where the lode has the same favourable indications as north of the shaft; it is intersected by several small cross branches, wherein some good lead is found, but there is no appearance in the level of either of the east and west lodes having been intersected. All the underground operations have been suspended for the last month, from our inability to keep the water with the whim. The engine having been bought, every preparation is being made for its erection. The building of the engine and boiler-house, &c., and stack, together with raising and carriage of stone, lime, sand, &c., has been contracted for, costing, in the aggregate, 5*s.* 6*d.* per cubic yard. These buildings I expect will be completed in five weeks, after which no time will be lost in getting the engine at work, which will occupy us about another three weeks, making about two months from the present date.

GREAT WHEAL BADDERN.—The 51 end is still going forward in rather hard ground, consequently the lode in the end is not so productive; the stopes in the back are becoming thin, however they contain a good lode of lead. In the 40 end the ground is good for driving, and the lode fairly productive; the stopes in the back, east and west of Buckley's, are turning out well; the 30 end men are put to rise in the back of this level, but will resume driving next week; the stopes in the back, west of Burgan's, and also west of Buckley's, are not so good this week. In the 20 fm. level the lode in the end still continues highly productive, and ground fair and congenial for lead; the stopes in the back of this level are looking well. The cross-cut is still in hand, and expect to cut the new lode shortly. The adit end is without alteration since last reported. We have completed the preparatory work in the 30, at Burgan's, and proceed forthwith to sink the shaft to the 40, unless prevented by water. We are sinking a winze on the caunter lode in the adit level; we have not yet directed our search for the caunter lode at surface, and westward from the junction, but we do so this week. The dressing and surface operations are not so forward as we could wish, the dressing girls having hindered or lost time. In conclusion, I beg to remark that the 20, which is extended considerably further in the eastern hill than any of the lower levels, and the end being so highly productive for the last 70 or 80 fms. driving, may be looked upon as a very pleasing and important feature, particularly when we refer to the fact of the new lode having been cut a little to the south at this extreme point of our workings; and it is only necessary to prosecute this sett properly to make it an immediately valuable mine.

HELVELLIN (WESTMORLAND).—In the old level the vein contains a quantity of stiff clay, same as in the low level, and has a little more ore. We are close upon the junction with the main vein. The vein in the low level has been improving all the last month, and the forehead now contains cauk, mundic, blende, quartz, and small pieces of ore. We are still driving by the west cheek in a soft part of the vein, and have hard veinstone on the east side of us.

HOLMBUSH.—The ground in Hitchins's engine-shaft, sinking below the 132 fm. level, is getting more favourable as we proceed, and is again set at 25*l.* per fm.—stent for the month. The ground in Wall's engine-shaft, below the 100 fm. level, is more favourable than I ever saw it before, now set at 26*l.* per fm., stent for the month, and we hope and trust we have got near the bottom of the ironstone floor. The lode in the 132 fm. level south is 2 ft. wide, composed of prian, spar, and stones of lead, opening ground that will set at a moderate tribute when drained. The stopes in the back of this level are not so productive as they were, taking the length into consideration. There is one point, however, 10 fms. west of the end of ground, that will produce 3 tons of copper ore per fathom, at which place we are putting up a rise and stoping the ends of it. The stopes in the bottom of the level near the cross-course will produce 2 tons of ore per fm. The lode in the 132, west from the diagonal shaft, on the north part, is poor and hard, and is for the present suspended, and the men set to drive east of the cross-cut on the same part. The lode in the rise over this level, and the lode in the winze sinking below the 120, is producing stones of copper ore. Here we expect to make a communication in a fortnight, after which we shall sink below the 132 with nine men, to reach the 147 fm. level with all possible dispatch. The flap-jack lode in the 120 fm. level, east of the great cross-course, is 2 ft. wide, composed of mundic, spar, blende, and stones of ore: it is looking better and producing more ore than I ever saw it before in this level. The lode in the 110 fm. level, east of the same cross-course, is 26 in. wide, producing 2 tons of ore per fm. The lode in the 100 fm. level east is 18 in. wide, composed of spar, mundic, and stones of ore. We have met with two flookan cross-heads in this level within the week, which have rather disordered the lode, but beyond them we hope to find it more compact and productive. The flap-jack lode in the 100, west of Wall's engine-shaft, is 4 ft. wide, composed of mundic, spar, and stones of copper ore of good quality.

KESWICK.—In the 20 fm. level, north at Brandley, we have cut a run of ore, which, if it holds on as it is now standing, is worth upwards of 2 tons to the fathom. The 20 fm. level, north of Lynn's rise, is on the average worth 15 cwts. per fm., and in parts will yield 30 cwts. per fm. The stope is about 3 fms. in length. In the 20 fathom level south we have no ore of consequence at present, but a promising lode, composed of quartz and blende, with a little ore. The engine-shaft is now down upwards of 3 fms.—the ground pretty easy. The salt sump is improving, and we have just shot into a place a foot wide of nearly solid ore. At Thornthwaite, the 17 fm. level is worth 7 cwts. of ore per fm. The bottom level sink is worth 10 cwts. per fathom. We have commenced driving the 37 fathom level for the orey ground, which we expect to cut in 15 fathoms.

KIRKCUDBRIGHTSHIRE.—The lode in the 86, east of Stewart's, is 2 ft. wide, with stones of ore; west, 4 ft. wide, yielding 6 cwts. of lead to the fm. In the 74 west it is 3 ft. wide, with a good stone of ore coming in. East of Gilpin's it is 2½ ft. wide, and very kindly for lead; west, it is 3 ft. wide, yielding ½ ton of lead per fm. In the 62 west it is 2½ ft. wide, yielding 7 cwts. lead per fm. The 50 west is 3 ft. wide, yielding 8 cwts. lead to the fm. The 40 west is 3½ ft. wide, with a small branch on the footwall.

LYDFORD CONSOLS.—At Wheal Mary, the lode in the adit level, south of gossan shaft, is large and very kindly, being composed of quarts, mundic, spots of lead, and good quality copper ore. The Fanny lode, now opened upon for a length of 300 fms., presents the same favourable indications as noticed in former reports—being of very large size, and composed of all the characteristics necessary to constitute a very kindly lode. At Wheal Adventure, the lode in the adit level south is composed of flookan, mundic, and occasionally spots of lead—a very kindly lode. We have not done anything towards raising the collar of the engine-shaft in the past week, the masons having been busily engaged walling up the sides of the wheel-pit, which I am glad to say is nearly completed, and will be ready to receive the axle by to-morrow evening (7th inst.), when no time will be lost in putting the wheel together, which I hope will be ready to work early in September next. The greatest part of our leats are finished, except the staunching, which we shall commence shortly.

MERLLYN.—The lode in the whim-shaft below the 26 fathom level is increased in size, worth about 12*l.* per fm. The lode in the winze, east of whim-shaft, below the 26 fm. level, is still small and unproductive. The lode in the 26 fm. level, west of whim-shaft, is worth 15*l.* per fm. The lode in the 16 fm. level, west of whim-shaft, is more settled, worth 6*l.* per fm.; the lode in the 16 fm. level, west of engine-shaft, is worth 25*l.* per fm. The lode in the 15 yard level, west of engine-shaft, is worth 20*l.* per fm.

NORTH BASSET.—The new shaft is nearly completed to the 82 fathom level; immediately after which we shall again commence to sink on the course of the rich lode in the shaft; in the 82 fm. level we have a good lode of yellow ore, 4 ft. wide. The lode in the winze sinking under the 72 fathom level is 5 feet wide—a solid course of yellow ore.

PRAED CONSOLS.—We have now cleared up the old workings to the bottom on the north lode, and have found it to be equally as good as it was reported to be—in fact, there is a good course of tin going down in the bottom of the workings; the lode is about 18 in. wide, and averages 8*s.* per bushel of 22 gallons. There is very good ground about it on working; and an end could be driven through it for 40*s.* per fathom; it is worth 10*l.* per fm., and it would be worked in the back of a level for 6*s.* 8*d.* in 1*l.*; but the same thing which caused the former workers to abandon it, also hindered us from working it to any advantage—namely, the water, that great impediment to all mining enterprise. I would impress on the minds of the committee and the shareholders the necessity of putting an engine on it at once. In my opinion, if an engine was put on it to keep the water to enable us to go down deeper, considerable profits would be realised from this place in a comparatively small time. The stopes on the cross lode are looking just the same as they were when last reported.

RIX HILL.—The middle shaft is sinking by the side of the lode. No lode taken down for last week. The 50 end is still poor.

SOUTH OF SCOTLAND.—The lode continues to be larger in getting down: the ore is a little improved in quality, and much about the same quantity.

SOUTH TOLGUS.—The 66 fm. level is set to drive east, west, and north. The 54 was driven nearly 7 fms. west in the same month; the 54 east was driven 5½ fms. and produced 5 tons of ore, the present end producing ½ ton per fm. The 42 east, on south lode, was driven 5½ fms., and produced 3 tons of ore, the end now producing ½ ton per fm.; the same level west, on Youren's lode, was driven 3 fms., producing 3 tons of ore. The 32 west, on the same lode, was driven 6½ fms., and produced 13 tons of ore, the end now yielding ¾ ton per fm. The computed produce for last month is 216 tons and 25 tons of halvans ore.

TRELAWNY.—At Trelawny shaft, the cross-cut in the 107 fathom level is driven 3 fms. 4 ft.—the ground still favourable. In the 92 end north the lode is 1½ foot wide, and worth 7*l.* per fm.; in the south end, in this level, the lode is 3 feet wide, and worth 7*l.* per fm. In the 82 end north the lode is 3 ft. wide, and worth 10*l.* per fm. In the 72 end north the lode is 3 feet wide, and worth 7*l.* per fm. At the north mine, in the 78 end, north of Trehane, the lode is 2 ft. wide, and worth 7*l.* per fm. In the 68 end, north of ditto, the lode is 2 feet wide, and worth 5*l.* per fm. At Smith's shaft the cross-cut is driven 10 feet, and they have now got the capels of the lode, and, perhaps, in another week we shall be able to report on its quality. The 55 end north is still poor. The winze in the bottom of the 40 is sunk 6 fms., in which the lode is 1 foot wide, and poor. The stopes in the back of the 55 fm. level are poor, and the others, on the whole, are much the same as reported of late. We sampled on Friday, the 1st inst., 98 tons (computed) crop lead ores.

TRELEIGH CONSOLS.—Christoe Lode: In the 100, west of Garden's, the lode is 20 in. wide, with stones of ore. In the 90, west of ditto, there has been no lode taken down this week; in the winze below the 90 the lode is 3 feet wide, worth 30*l.* per fm.; in the stopes above the 90, west of Harrie's winze, the lode is 2 ft. wide, worth 12*l.* per fm.; in the stopes above the 90, west of Terrel's winze, the lode is 2½ feet wide, and worth 30 per fm. In the 80, west of Garden's, the lode is 1 ft. wide, with stones of ore; in the 80, east of Christoe's, the lode is 20 inches wide, with good stones of ore.—Parent Lode: In the 64 cross-cut, north of Parent shaft, we are driving to cut Parent lode; in the 64, south of ditto, we are driving to cut the middle lode. In the 30, east of ditto, the lode is still disordered.—Middle Lode: Burgess shaftmen are cutting plat and casing down shaft, to prepare to sink below the 13 fm. level.

TREVILLE (SILVER-LEAD).—We have made good progress this month—viz.: sunk the engine-shaft 3 fms. 1 ft., and driven on the course of the lode in the 22 fm. level south 5 fms. 2 ft. In my report of July 30th, I held out strong hopes of an orey lode being near; I am glad to say it is as I expected it would be. I am having the lode stuff put in a heap by itself, although I do not think it is good enough to free costs at present; it may do to dress by-and-bye, when we are in full course of dressing ore. It affords me much pleasure to inform the adventurers the lode never presented such promising features as at present, with great prospect of continued improvement; and from the cheapness with which the ground can be spent, it is evident we shall not be long, after the lode becomes rich, before we have a parcel of ore ready for market. On Saturday the following bargains were set:—The engine-shaft to sink by eight men, at 9*l.* per fm., stented for the month, and 25*l.* for cutting bearer holes, fixing cistern and two lifts, and completing pitwork to the 22 fm level. The 22 fm. level south to drive at 45*s.* per fm.; the whim, drawing, carriage of materials, sawing, &c., as before. The machinery is working well; the water-course as last reported.

UNITY CONSOLS.—At Gray's engine-shaft, the lode in the 60 fathom level east is 2½ ft. wide, producing from 4 to 5 tons of copper ore of excellent quality per fm.; set to eight men, 5 fms. stent, at 35*s.* per fm. In the 60 fm. level west the lode is 3 feet wide, producing 5 tons of copper ore per fm, and in quality much the same as when you saw it last week; set to eight men, 3 fms. stent, at 42*s.* 6*d.* per fm. In the 50 fm. level, east of engine-shaft, the lode is 2 ft. wide, containing flookan, mundic, spar, and good tin ground throughout; set to two men and two boys, 6 fms. stent, at 25*s.* per fm. In the winze sinking in the bottom of the 50 to 60 fm. level, east of engine-shaft, the lode is 4 ft. wide, producing 6 tons of copper ore per fm., and of superior quality; set to four men, at 20*s.* per fm. In the 50 fm. level, west of engine-shaft, the lode is still 2 ft. wide, producing some good black and grey copper ore; set to two men and two boys, 1 fathom stent, at 60*s.* per fm. In the 30 fm. level, east of Buckley's, the lode is 3 ft. wide, yielding good tinstuff, and worth 6*l.* per fm. with occasional spots of ore; set to three men and three boys, 10 fms. stent, at 25*s.* per fm. At Lambo, in the 40 fm. level, east of Kenworthy's, the lode in the end still continues good, with but little alteration since last week's report, set to six men, 4 fms. stent, at 47*s.* 6*d.* per fathom. We have drained the water from the course of ore gone down in the 30, east of Tweedale's, and have commenced clearing up the deads out of the old men's sink, and as far as we have gone down we have found a good lode of ore, each end of this sink producing at present about 1 ton of copper ore per fm., and expect to find it much better as we go down; set to four men, at 65*s.* per fm. The winze in the bottom of the 30 fm. level, east of Kenworthy's, was referred to at the setting on Saturday, at captain's price of 20*s.* per fm.; it will produce 1 ton per fm., worth 10*l.* per fm. or ton. I shall set this winze to-morrow (August 5) at the price named. The cross-cut towards Hampton's lode is still continuing with all speed; set to three men and three boys, 5 fms. stent, at 30*s.* per fm. We are making good progress in our dressing operations, and shall have from 90 to 100 tons ready for sampling next week. The following is the assay of four stones of ore from the 60 fathom level, by Mr. William Andrew, of Redruth, on the 28th July last:—No. 1, 20; No. 2, 19; No. 3, 22; No. 4, 7.

WARLEGGAN CONSOLS.—We put our new wheel to work on July 24, and it works exceedingly well; the water is in fork, and we have resumed working in the shaft again. In cutting some ground for fixing the work in the shaft we broke some excellent work out of the lode we cut when sinking about 7 fathoms deep, but as we cannot work this lode from the engine-shaft, we have commenced sinking a small shaft, about 6 fms. north of the engine-shaft, which will enable us to work away this lode.

WEST BASSET.—The south lode in the 32 is much improved, as also is the rise in the back of the 42. The lode in the 30, driving west, is 2 feet wide, and, on the whole, our prospects are very encouraging.

WEST WHEAL JEWEL.—In the 85 fm. level, west of Williams's cross-course, on Wheal Jewel lode, the lode is producing stones of ore—drove last month 2 fms. 4 feet. In the winze sinking below the 70, west of Williams's cross-course, the lode is unproductive; this winze is suspended for the present—sunk last month 1 fm. 1 ft. 6 in. The 42, west of Quarry shaft, on Tolcarne tin lode, is worth 18*l.* per fathom—drove last month 2 fms. 4 ft. 6 in. In the 57 west the lode is producing stones of tin—drove last month 1 fm. 1 ft.; in the 57 east the lode is unproductive—drove last month 1 fm. 3 ft. 6 in. Quarry shaft, sinking below the 42, is worth 6*l.* per fm.—sunk last month 2 fms. 0 ft. 9 in. The cross-cut, south on Williams's course, at deep adit, drove last month 2 fms. 5 ft. 6 in. The stopes in the bottom of the 12, east of Tregoining's winze, on Tolcarne tin lode, are worth 16*l.* per fm. The two pitches in the bottom of the shallow adit, west of Tregoning's shaft, on the same lode, are worth 10*l.* per fm. each: these pitches are working on tribute.

WEST WHEAL RUSSELL.—No lode has been taken down in the 37 fm. level since last report; in the rise above this level the lode continues to look well, producing from 2 to 3 tons of ore per fm. In a shaft sinking about 20 or 30 fms. to the west of the Tamar river, I am glad to say there is a very kindly lode, upwards of 2 fee wide, containing gossan of good appearances, with black and yellow copper ore, being only from 6 to 7 fms. below the surface.

WEST WHEAL VIRGIN.—We have tin in each end, east and west of the engine-shaft. The east shaft, on the north lode, is nearly completed to the adit. In the shaft, 100 fms. west of this, we have broken some splendid stones of tin. We have a good lode going down in this shaft, which we shall now sink with all speed; the lode is 12 in. wide, with a beautiful appearance.

WHEAL CREBOR.—The lode in the pitch above the 54, at Rundle's, has improved in the past week, now worth about 8*l.* per fm.—a very promising lode. Our engine-house will be covered over, all being well, on Monday, ready for the engineers to put in the engine. The masonry appears to be good; we have now built the engine-house, the stack is about 17 ft. above the level, and a good deal of the wall of the boiler-house, all of which I believe to be firm. The first plunger-lift, which is from the 40 fm. level to the surface, will be completed this week. Next week we shall commence sending down sufficient pumps below the adit to fork below the 12, or first level under adit; and rear the same up to the 40 plunger, and complete all our pitwork, footway, &c., from the water to surface, so as to be in time for the engine being put to work. Everything is progressing satisfactorily, as far as strength and conveyancing.

WHEAL HAMLYN.—The lode in the adit end is looking very promising, and the malleable, instead of being to the south of the bulk, is now to the north—consequently there appears to be a change; but I am sorry we cannot work as we would, on account of bad air. I have put two men to clear up the shaft in the quarry, when we shall sink as deep as we can for water, and drive towards the adit end.

WHEAL LANGFORD AND BARING UNITED.—There is nothing particularly new in this mine since my last. We are getting on as fast as possible with erecting the engine; I have written the engineers to forward the remainder of the machinery; we have only received the bob since I last wrote you. We shall take down some of the silver lode to-morrow, the 8th inst. We are still driving Wheal Baring adit with two men, price 32*s.* 6*d.* per fathom; we have a change of ground the last 6 ft., and more water issuing from the end, which indicates that we are approaching nearer the lode. We have two parcels of silver ore more prepared for the market, computed 2 tons 5 cwts., samples of which are forwarded to the smelting-works.

WHEAL RUSSELL.—During the past week, nothing has been done in sinking the engine-shaft, in consequence of the water being turned out of the leats, &c., for the purpose of repairs, which deprived our engine-wheel of its water; the shaft is now down to within 2 ft. of the 60 fm. level, where we shall cross-cut the lode. Some improvement has taken place in the 48 fm. level driving west from the engine-shaft—the lode being large, producing good stones of ore. The driving of the 16 fm. level south, on the cross-course, has been continued, where strings of copper ore are occasionally being met with; but the point of the lode seen in the lobby to the east has not yet been reached. We have commenced driving the 37 fathom level south on the above cross-course with the same object as the above—namely, for the purpose of finding the lode to the east of the cross-course. The pitches in the 37 fm. level are again let at 7*s.* 6*d.* in 1*l.*, and, from present appearances, are likely to yield fair quantities of ore. In consequence of the present water-wheel not being of sufficient power for pumping the water, drawing the stuff, crushing and stamping the ore, it has been deemed advisable to erect a new one, of 45 feet diameter by 4 feet breast, and the necessary preparations are now being made for carrying it into effect.

WHEAL TOM.—On Saturday I received the boiler on the mine from Mr. Mears, of Plymouth, and it is certainly as good an article as I have ever seen. All the timber for the shaft, capstan, and shears, is on the mine, and the shaft secured. The horses, with waggons and carts, are drawing lime, sand, and stone, for the engine house and wheel pits. We shall commence the wheel pit immediately. I have sent for Mr. Jenkins, the engineer, so we shall at once commence the engine-house, as everything is ready. The deep adit I have set to four able miners, 4 fms. stent, at 3*l.* per fm.; the lode in this adit is 3 ft. 6 in. wide, a very kindly one, with spots of lead throughout. The adit on the tin lode I have set to six able miners, 6 fms. stent, at 3*l.* 10*s.* per fm.; the lode in this end has not been taken down since last reported on. At the shaft on the north lode the water is very quick—a good indication; we are down about 19 fms., and the men are doing their best to complete their contract to the 20 fm. 4 ft.; the instant the contract is completed it is intended to drive east and west on the lode, the north part of which is 3 ft. wide, composed of lead, jack, mundic, and copper—a very promising lode indeed. The horse of killas between the two branches is holding down, and all the water is issuing from the south part of the lode, which I think is the master part of it, and which will be proved when we commence our drainage. The engine-shaft has been secured with timber, and the nine men are sinking on with good spirit. I hope they will complete their bargain by the middle of next week. The lode in this shaft is 3 ft. wide, kindly for tin. We have from six to eight barrels of water per hour in the shaft, which is issuing from the lode. The ground by the side of the lode is mineralised white killas. On the whole, our mine is looking well, and bidding fair to be one of the best, and all our workings are going on rapidly and with spirit.

WHEAL WREY CONSOLS (ST. IVE, NEAR LISKEARD).—Since we commenced operations in this mine we have cleared the adit level to the end—viz., 26 fms., and find the lode to be from 3 to 5 feet wide, composed of flookan, about 2 ft. wide, with gossan and mundic, producing good specimens of carbonate of silver-lead. This mine is situate to the north of Wheal Trelawny about three-quarters of a mile, and is bounded on the west by Wheal Venton and Butterdon, in strata very congenial for silver-lead ore. The sett is very extensive, embracing a great number of promising lodes, and in a very productive mining district. The lode now being explored has been inspected by several respectable mine agents, and is declared to be one of the most promising character in this district. Six miners are now engaged in extending the adit upon the lode, at 30*s.* per fm.; and we expect, on our driving further into the high ground about 30 fms., to be under the gossan and into a lead lode, which present appearances fully warrant.

P. Q. ROSKILLY, manager; P. ROSKILLY, purser; P. HARVEY, agent: *July* 29.

WHEAL ZION.—We have opened upon the course of ore in Lemon's shaft in the 12 fm. 4 ft. level; it looks remarkably well, and now stands as a pillar to the south side of the shaft. A few tons of ore are brought to grass, raised by the tutworkmen in fixing timber to secure the level, and worth from 10*l.* to 12*l.* per ton. The course of ore is dipping east at an angle of 35°; it has increased from 18 in. to about 2 ft. in thickness, and appears to enlarge several inches to the fathom in depth. When the whim is fixed (which will be in a few days), we shall continue to sink by the side of the lode to the depth of 20 fms. If the ore continues to make dipping as it now does, we shall have from 40 to 50 fathoms backs of this splendid lode at the depth only of 30 fms., which will yield thousands of tons of rich mineral, as was the case at Devon Great Consols under similar circumstances.

FOREIGN MINES.

ALTEN MINES.—[From the 3d to the 16th July.]

Raipas.—Within the past four days we have resumed the whole of our workings in the 20, with the exception of the winze sunk on No. 11, and which place we at present are unable to proceed with, on account of the water. In the stope west of Monk's shaft no alteration whatever is to be noted, the ground generally continuing hard, although some good stones of ore are occasionally produced. In the northern cross-cut the ground is composed of limestone and jasper, carrying with it a smooth wall, but without containing any ore; it is, however, speedy and favourable for driving. The lode in the 15 fm. stope has been thrown more easterly, and is at present disordered; we expect, however, shortly to see an improvement here. No alteration has taken place in the 10 fm. stope worthy of remark. The produce for July will be about 2 tons of copper.

United Mines.—The new discovery alluded to in my last report is not quite so promising, still we continue to explore, in the hope of its improving in depth. The tributers have raised a small quantity of ore from this lode, but the quality is not so good. The tributers have resumed operations on the back of Woodfall's lode, where the prospects are favourable. The produce of these workings at present is small, but we have every reason to anticipate an increase.

Old Mine.—Since my last report the prospects of this mine have undergone a slight improvement. The foot stope in Slungi's sink has shown a change for the better, and although the lode is somewhat smaller, the ore has considerably improved in quality. The north stope continues to develope itself favourably, and holds out hopes of the present good prospects continuing. The produce from the western stope is rather less than usual, the returns, however, have been pretty regular throughout the month. We have recommenced operations for opening the lode in the north-west shaft; the returns are as yet but trifling, and no increase can be expected before the working is more excavated; the ore is rather of a mundicy nature. The new discoveries at this mine have not improved; we find it advisable, therefore, to stop all proceedings here for the present, as the hands can probably be more profitably employed.

Michell's.—The workings at this mine are carried on on the usual small scale; the tributers, however, are making some tolerable good returns of ore.

Mancur's.—The appearance of the new lode is promising, and the tributers are producing some small parcels of ore of the usual good quality.

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares, July 26.—We have this day measured for July and reset most of the bargains for August. The 55 fm. level west has been driven 2 fms. 4 ft. 7 in., and is reset to the same pare—viz., three Englishmen, with three Spanish labourers, at the same price—950 reals per fm., with ½ real per arroba for lead ore; the lode in this end is worth 2 to 2½ tons per fm. The end driving east of Shaw's shaft in the 45 fm. level has been driven 4 fms. 1 ft. 4 in., and is reset to drive by four men, at 330 reals per vara; the lode continues as last reported—worth 1 ton in a fm.; the 45, west of San Juan shaft, has been extended during the month 9 fms. 1 ft. 8 in., and is reset to drive by four men, at 150 reals per vara; the end is at present with a small portion only of lead. In the 31 fm. level, east of Shaw's shaft, the clearing has been effected for 5 fms. 1 ft. during the last month, and is reset at 200 reals per fm. During the month's clearing we have met with nothing to enable us to judge of the value of the lode taken away, and the clearing is not yet effected to the bottom of the old men's workings. The tribute pitches reset for August are 15 contracts, 40 men, at about the usual tribute. I annex the stock account of ore and lead. Lead ore weighed in July 26, 46 tons 13 cwts.; total in stock, 760 tons 4 cwts. Pig lead, 23 tons 17 cwts.; total in stock, 200 tons 7 cwts.

NATIONAL BRAZILIAN MINES.—[Received 7th August.]

Cuiaba, June 6.—We made the communication with the winze to the rise on the 1st inst. Since then we have been busily engaged in securing the ground over the top of the winze, and are now stopeing east with all the energy possible; the lode here is 6 fms. wide. Yesterday, we met with a soft floor on the north wall, and its underlie bearing regularly with the lode; but cannot say as yet if it is likely to continue to any depth or not. We are sanguine as to our immediate returns from the circumstance of the presence of the soft floor, which appears to widen as it goes down. We can only say that a small carumbel of this stuff, produced 13½ grs. of gold; and taking the lode at 80 carumbels, the stuff in question produces 15 oits. per load. It is certain that our produce has made a start for the last two washings, chiefly that of to-day's—the headskins giving 4 ozs. in the 24 hours from a very indifferent supply of stone.

Cocaes produce from 25th May to 4th June	Rs.	9	1	0	25				
Cuiaba „ „ 27th May to 6th June		3	3	6	62	Rs.	12	4	7	15

THE HALL OF COMMERCE.—The advantages of the Hall of Commerce, in Threadneedle-street, seem to become more appreciated by the trading and mercantile interests than they have been hitherto. As a resort for men of business coming to the metropolis occasionally, as well as for those resident in London, it has no equal, for in addition to being a reading-room, it has the advantages of a club; and this at the low figure of 2*l.* 2*s.* per annum. The system of reference pursued as to the admission of members is a guarantee that the Hall will be select, which was not the case under the former management. We are happy to hear that the list of country subscribers has been increased in consequence of the Exhibition, and that a large accession of strength has taken place by all the members of the late Mining Exchange having gone over to the Hall of Commerce.

ROYAL GARDENS, VAUXHALL.—On Wednesday next a variety of entertainments of a novel description, together with a double display of fireworks, and a grand aeronautic race by three balloons, will take place at the Royal property, for the benefit of Mr. Wardell, the spirited lessee. From the long experience the beneficiare has had as a caterer for public amusement, combined with his urbanity to his guests, as well as the general good management of the gardens, we confidently hope that his approaching benefit will prove what he so richly deserves—a bumper.

THE KILBRICKEN MINING COMPANY.

This company has been really finally wound-up, and it is the only one under the Act that has arrived at the far-distant goal. By a system of vigorous well-timed measures the official manager has been enabled to arrive at this result, as well as to present the contributories with a small return, as will be seen by the following abstract of the report which he presented before Master Richards on Monday:—

The document sets out by stating the locality of the mines in Ireland; that the company for working them was formed in 1846, when they were held on lease by Mr. Henry Crockford, for 21 years, from Mr. John M'Donald, to whom a royalty of 1-10th of all the ores to be raised was reserved. That Mr. Crockford contracted to sell his interest for 10,000*l.*, to which 3000*l.* was to be added by shares—making the working capital 13,000*l.*, in 1300 shares, of 10*l.* each; that a meeting was held in Oct., 1846, when 31 shareholders subscribed their names, and the adventure was then formally got up, on the Cost book Principle—Mr. Crockford taking 650 shares for himself; that the whole of the capital was there and then subscribed and paid, out of which Mr. Crockford received 10,000*l.* for his interest in the mines, machinery, &c. A meeting was held in July, 1847, when it was found that there was only 300*l.* in hand, and a call of 10s. per share was then determined upon, and responded to, to the amount of 590*l.*, after which another call was made in the following October of 1*l.* per share, and paid upon 755 shares. The working of the mines then went on until 1848, when a meeting was held, at which it was determined to double the original capital of the company, by the issue of 1300 new shares, of 3*l.* each, of which one-half only was required from those who had paid the two previous calls; and this arrangement was confirmed by the holders of 1256 shares, and a response to the amount of 552*l.*, but the new shares were not issued. In July, 1848, it was found that the mines were making no returns—that the affairs of the company had become embarrassed, and the following November the whole plant, machinery, &c., were sold by auction to the lessee, Mr. Crockford (there being no bidder), for 2312*l.*

Then follows an analysis of the accounts of the company during its short career of three working years, from which it appears that the production of ores from the mines amounted to 930*l.* 5s. 5d; the cost of working 7342*l.* 7s. 2d., and the loss on the purchase and sale of the mine and machinery amounted to 9127*l.* 1s. 11d.—showing a total loss to the shareholders of 15,539*l.* 3s. 8d., and the outstanding claims (still unsatisfied) amount to 575*l.* 15s. 8d. In addition to the purchase-money paid to Mr. Crockford, the purchase-money of the machinery and steam-engine amounted to 1439*l.* 2s. 7d.

The foregoing is the result of the investigation made by the official manager, after the affidavit of the solicitor of the company, which was to the effect, that there were no assets whatever, and who refused to give up the books and papers until he had been paid his bill of 100*l.* After the list of contributories had been settled, only 38 could be fixed with the liability of the whole of the 1300 shares. That the transactions of Mr. H. Crockford, in regard to the mine, were such as to induce the Master to have him summoned and examined, and the result was, that it appeared that Mr. Crockford had sold the mine for a valuable consideration to a Mr. Henderson. This fact led to several meetings of the shareholders, who accepted a compromise, at the recommendation of the official manager, from Mr. Crockford, who paid 400*l.*, on his getting a discharge from the London and Westminster Bank for their claim of 516*l.*, and a claim of 100*l.* to Mrs. Crockford, as well as the royalty of 70*l.*, and Mr. Crockford then gave a release, which included also the claims of Mr. F. Crockford, and the calls due by Mr. Austen, a shareholder. On the 13th of April, 1850, the Master made a call of 1*l.* 10s. per share, to meet the claims of creditors, which amounted to 565*l.* 9s. 5d., and the result of the call was, that the official manager received 1466*l.* 16s. 6d., and he had now a balance in hand of 1166*l.* 4s. 10d., from which was to be deducted law costs, debts, expenses of winding-up, &c., reducing it to 610*l.* 7s. 4d., which will be equal to a dividend of 14s. 7d. amongst the 32 contributories, on advances made by them beyond the original capital, which amounted to 832*l.* 15s. The claims allowed by the Master amount to 228*l.* 13s. 10d., and those disallowed to 95*l.*, while those unsupported by evidence amount to 117*l.* 10s. 3d., and those in suspense to 124*l.* 5s. 4d.—The report having been read in detail, the MASTER expressed his entire approval of it, and ordered it to be filed.

Mr. GATES and Mr. MASTERMAN said they were quite satisfied with the report, and bore their testimony to the efficiency of the official manager, Mr. Wrighte, and his solicitor, Mr. Harris, in having so successfully and satisfactorily wound-up the company at so small an expense, and in so very short a time.

[So late as Thursday last, a notice was served on the official manager, by the solicitor of Mr. Crockford, to the effect that that gentleman intended to appeal generally against the official manager's report, upon the ground that he ought not to have been excluded by the Master from the dividend of 14s. 7d., by reason of his having given a release. The appeal is to be on behalf of the Messrs. Crockford and Mr. Austen.]

THE DUISBURG IRON COMPANY.

There was a meeting before Master Humphry, on Saturday, for settling the list of contributories in this company. The petitioner for the winding up is Charles Viscount de Secqueville, in whose prayer the following facts are set forth:—That there were certain iron and zinc mines in Westphalia, in the kingdom of Prussia, which the Viscount proposed, in the year 1847, should be worked, and for which purpose a capital of 300,000*l.* would be required. That in order to carry out this design, the petitioner had, in conjunction with others, expended large sums of money in obtaining a survey of the mines, as well as in procuring from the Prussian Government grants in perpetuity of the said mines; but, in consequence of the disturbed state of the country, owing to political and other causes, in the year 1848, particularly in the north of Germany, where hostile proceedings had been going on to an alarming extent, it was considered by the Viscount and those acting in unison with him, to be highly imprudent and impolitic to prosecute the formation of the company. That eventually, on the treaty of peace having been signed by the Danish Government and the Germanic Confederation, in the latter part of the year 1848, it was resolved by the Viscount and those embarked in the scheme with him, to re-establish the company upon a smaller scale than that originally contemplated. In furtherance of this design it was agreed that the company should be conducted upon the system known in England as the Cost book Principle, and that in Prussia it should be carried on under the designation of "*société en commandite par actions*," which is, as near as possible, equal to the system known in England as the Cost-book Principle. That accordingly, on the 1st of January, 1849, the rules of the company so to be formed were duly drawn up and signed. That in accordance with those rules the petitioner was appointed overseer of the several mines of iron ore situate in the parishes of Raufel-bornig, Eckessay-boerluer, and Fleyhaldens-vorsalle, in Westphalia. That by the third article of the agreement it was arranged that the company should go on under the title of "the Duisburg Iron Company," and be placed under the entire control and management of petitioner, who was to have been purser of the company, under certain conditions. That by the fourth article of the rules it was arranged that the chief office of the company, for all legal purposes and business transactions, should be in Cologne, under Prussian authorities, or in Elberfeld, in Rhenish Prussia, which is still subject to the enactments of the codes regulating France and Belgium, and known as the "Code Napoleon;" but that the central office of management was to be in London. That the company was to be established for 45 years, commencing in Oct., 1848, and at the expiration of that period its establishment was to be renewed for 45 years more, and the capital was to have been limited to 45,000*l.*, or 1,125,000 francs, to be spread over 3000 shares, of 15*l.*, or 100 thalers each, with power to increase, if need should be; the deposit was to have been 2*l.* 10s. per share, the calls not to be made within less than three months, and every shareholder paying up 5*l.* was to have a receipt in full, and due notice to be published in the *Mining Journal*. The petitioner then goes on to say that he had assigned his grant of the perpetuity of the mines to certain trustees, subject only to certain royalties. That the trustees were Major Morse Cooper, the Hon. M. Gore, and G. F. Murdock, and on the 3d Jan., 1849, a prospectus was issued. That petitioner has advanced large sums of money for the purpose of carrying on the company. That he undertook a continental journey on the business of the company, and borrowed 200*l.* from Capt. Bristoe, on the security of the mines, for which an action had been commenced against him. That there was now the large sum of 70,000*l.* due to him, and therefore he prayed for the winding-up, &c.

Several cases were gone into by the Master, but none of them appeared to be in a condition for investigation, and they, therefore, stand adjourned until after the long vacation: in the meantime, the Viscount is to remain out of his money—viz., 15,000*l.* worth of scrip, for which he advanced 400*l.* in cash.

THE GERMAN MINING COMPANY.

The official manager and several of the parties interested in the fate of this property assembled on Saturday before the Master, for the purpose of considering the present position of the company. It appeared that the continued unsettled state of political matters in Germany was such, that it was impossible to expect that a bidder could be found, though there were parties who would readily give 20,000*l.* for the property, so soon as a permanent state of peace should be restored in that country. Mr. Odenheiman, the Government Surveyor of Mines in Germany, was at present in London, and he had borne his testimony to the value of the estate, and a gentleman of respectability was still in treaty for the mines, and in this state matters remain for the present.

GREAT CRINNIS MINES.—We understand that these mines are likely to be again set to work: the lord, having taken legal possession a few years back granted in March, 1850, a new lease for 21 years, at the reduced rate of dues, 1-24th, until all the expenditure is returned, and then 1-16th permanent. When last wrought they were at 1-8th, yielding to the lord in less than 20 years 150,000*l.*, and to the fortunate shareholders a profit of from 5000*l.* to 9000*l.* bi-monthly. The sett is very extensive, the stratum killas, and the mine only sank to the depth of 110 fms., the chief workings hitherto having been confined to the orey ground at and above the 60 level. Many attempts since have been made to obtain the sett, but it could not be granted, owing to the non-surrender of the former one, which has only lapsed within the last four years. It is contemplated to erect a 70-in. cylinder engine, with steam crushing and winding engines, &c., and the capital to be 6000 shares of 2*l.* 10s. each. Parties of local standing in the mining district will take a leading interest in the concern, which offers sufficient inducement to other shareholders joining in prosecuting this ground, once the most productive and profitable in East Cornwall.

THE MINERAL WEALTH OF CLEVELAND.—The progress which is being made in the working of minerals in the district of Cleveland is very great. At Eston, extensive workings for ironstone are carried on by Messrs. Bolckow and Vaughan, of Middlesbrough, a railway having been completed up to the mines, and 1000 tons of the ore are taken away per day, to the works at Witton. A railway is now in progress from Coatham, through Mrs. Newcomen's property, to Upleatham. The Shotley-bridge Company, on the Earl of Zetland's estate at Lofthouse, are obtaining the iron ore, and conveying it by ships to Hartlepool. Thence it is taken by railway to their works at Shotley-bridge. At Skinningrove, on the estate of A. Maynard, Esq., the mineral abounds, and is worked very extensively by Messrs Losh, Wilson, and Bell, who have constructed a railway from the mines to the sea-shore, where they have made a pier of wood and malleable iron, so that vessels can be laden with great facility, and the stone is conveyed in ships to their furnaces on the Tyne. The stratum of ironstone varies in Cleveland from 10 to 16 feet in thickness, and is of excellent quality. On the estate of Miss Middleton, of Grinkle-park, the same company are working the ore, and conveying it by sea to their works.—*Gateshead Observer.*

The Magnetic Telegraph Company's Act (Henley's Patent) received the Royal Assent on the 1st inst. The offices of the company are to be in Liverpool, and it is said that extensive works, under the superintendence of Fox, Henderson, and Co., are to be commenced immediately. The first line to be laid down is the Lancashire and Yorkshire.

Current Prices of Metals, Stocks, & Shares.

METAL MARKET, London, August 8, 1851.

	per ton.
ENGLISH IRON. *a*	
Bar, bolt, & square, London	£5 2 6–5 10
Nail rods	6 2 6–6 10
Hoops	7 0 0–7 10
Sheets (singles)	7 12 6–8 10
Bars, at Cardiff & Newport	4 7 6–4 12 6
Refined metal, Wales*	3 0 0–3 5
Do. anthracite*	3 10 0
Pigs in Wales	3 0 0–3 15
Do. do. forge	2 5 0–2 10
Do., No. 1, Clyde *net cash*	1 19 0–2 0
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport*	3 10 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0
Stirling's Patent } in Glasgow	2 15 0
Toughened Pigs } in Wales	3 10–3 15
Staffordshire bars, at the works	5 5 0–6 0
Rails	4 17 6–5 0
Chairs (Clyde)	4 0 0
FOREIGN IRON. *b*	
Swedish	11 10–11 15
CCND	17 10 0
PSI	——
Gourieff	——
Archangel	——
FOREIGN STEEL. *c*	
Swedish keg	14 0–14 10
Ditto faggot	15 0–17 0
ENGLISH COPPER. *d*	
Sheets, sheathing, & bolts, *p. lb.*	0 0 9¼
Tough cake *per ton*	84 0 0
Tile	£83 0 0
Old copper *e* *per lb.*	8¾*d*
Yellow Metal Sheathing	7¾*d*
Wetterstedt's Pat. Metal†	*Cwt.* 1 11 0
FOREIGN COPPER. *f*	
South American, in bond	77 0–87 0
ENGLISH LEAD. *g*	
Pig *per ton*	17 0 0
Sheet	16 0–18 10
Pipe	19 0 0
Red lead	19 0 0
White ditto	24 0 0
Patent shot	20 0 0
FOREIGN LEAD. *h*	
Spanish, in bond	17 0 0
ENGLISH TIN. *i*	
Block *per cwt.*	4 4 0
Bar	4 5 0
Refined	4 10 0
FOREIGN TIN *k*	
Banca, H. C.	4 2–4 3 6
Straits	4 0 0–4 2
TIN-PLATES. *l*	
IC Coke *per box*	1 5–1 6
IC Charcoal	1 10–1 12
IX ditto	1 16 0
SPELTER. *m*	
Plates, warehoused *per ton*	14 10–14 12 6
Ditto, to arrive	14 10–14 12 6
ZINC. *n*	
English sheet *per ton*	21 0 0
QUICKSILVER *o* *per lb.*	3*s* 6*d*

Terms.—*a*, 6 months, or 2½ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct. dis.; *e*, 6 months, or 2½ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1½ p. c. dis.; *o*, ditto, 1½ dis.
* Cold-blast, free on board in Wales. † Dis. for cash in 14 days, 10 per cent.

WELSH BAR-IRON is in moderate request; in rails, business has been done at 4*l.* 15s. and 4*l.* 17s. 6d.

STAFFORDSHIRE IRON is less in request for shipments, although the demand for the home trade continues good.

SCOTCH PIG-IRON—No. 1, American brands, may be quoted at 40s. 3d., free on board in Glasgow, storekeepers' warrants; ordinary brands, makers' obligations, 38s. 6d.; the stock is increasing, and speculators have quite abandoned the article.

SWEDISH IRON—Several arrivals have taken place, but not meeting the limits of the consignees, have been trans-shipped to New York and Boston. The stock is small for the season.

SWEDISH STEEL—Not any transactions have transpired.

COPPER continues unaltered in price.

BRITISH TIN—No variation has occurred in prices; some large parcels in bar and block have changed hands, mostly on speculation.

FOREIGN TIN—The Dutch sale at Amsterdam, on Tuesday last, has been the all engrossing topic of the last few days; the quantity of slabs put up for sale was 111,190, and the result was as follows—viz.:

29,728 slabs of Banca, produced	47½	florins.
13,413 " "	47¾	"
43,805 " "	47¾	"
24,244 " "	48	"

Being an average of 47⅛ florins, which is equal to 80*l.* 5s., free on board at Rotterdam. The present stock of Banca and Straits may be estimated at 1350 tons, against 1000 tons on 7th August, 1850.

SPELTER—100 tons have been done at 14*l.* 10s., delivery in Oct.; the stock is 12,631 tons.

LEAD—The demand is good. In Spanish some considerable arrivals have taken place. The imports in July were upwards of 1000 tons, against 1200 tons in July, 1850.

TIN-PLATES—The demand continues good.

QUICKSILVER—The holders have submitted to a decline of 3d. per lb.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL,

FOR THE FIRST SEVEN MONTHS OF 1850 AND 1851.

Metals.	1850.	1851.	In. in 1851.	Dec. in 1851.
Spelter	*Tons* 2672	1150	—	1522
Copper	3325	2522	—	803
Iron, British, bars	30924	19300	—	11624
" rails	—	7229	7229	—
Ditto, Foreign	731	182	—	549
Tin-plates	*Boxes* 11633	18014	6381	—
Lead	*Tons* 1562	3046	1488	—
Steel	744	399	—	345
Quicksilver	*Bottles* 22	18	—	4

SCOTCH PIG-IRON TRADE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Unwilling as I am to trespass on your valuable space, I cannot, however, refrain from making a few observations on the very erroneous statements respecting this branch of industry, which are given by other journals. In the present letter I call the attention of your readers to the reports which appear weekly in the *Times*:—

May 6th, it states—"We have had no alteration in pig-iron this week; a small business for shipment and consumption has been done, and there seems a total absence of speculative demand."

May 13th.—"The pig-iron market still bears a declining aspect, without any apparent prospect of improvement."

May 20th.—"Our market has been very quiet during the week, and a slight decline in price has taken place, but without any increase in the amount of business doing."

May 27th.—"Our market has been unchanged during the week, and prices have scarcely varied; to-day No. 1 is held at 41*s.*; No. 3 at 40*s.* 9*d.*; No. 1 Gartsherrie, 41*s.* 6*d.*, but there is very little business doing."

June 3d.—"We have had a very dull week in pig-iron; the tendency of prices is in favour of buyers."

Any one reading such reports for the month of May must naturally suppose that little or no business was done; but what was the case? The local demand was *very good*, and the shipments alone amounted to upwards of 50,000 tons, or upwards of 16,000 tons *more* than in May, 1850; and the shipments for the six months, from January to June inclusive, are quite unequalled, being more than 85,000 tons in excess of the corresponding period of last year. Not wishing to occupy too much time, I at once call attention to the discrepancies in the following reports:—

June 24th.—"The make of iron is still very extensive, there being at present 110 furnaces in blast in Scotland, and average each a proportion of 120 tons per week."

Presuming the whole 110 furnaces (108 furnaces, however, is the correct average), therefore, had been in blast for the six months—say, 26 weeks—producing on an average 120 tons each per week, there would be a production of 343,200 tons; but, on the 22d of July, it is stated, we presume by the same correspondent, "The market for pig-iron has been quite inactive all the week, and prices, which are lower, may be nominally quoted," &c. "The production of Scotland, for the six months ending June 30th last, is estimated at 390,000 tons" (*say, in round numbers, only* 50,000 *tons more than the furnaces can produce on an average*), "and during the same period the shipments have extended to 250,000 tons." If, therefore, the last estimate is correct, the stock has not been reduced at all since the end of last year; if the statement of 24th June is correct, there has been a reduction of 55,000 or 60,000 tons in the stock, the shipments having been nearly 260,000 tons, and the local consumption about 135,000 or 140,000 tons.

Further, on the 22d July, it is stated, "Our pig-iron market has been almost without change during the week, and *bonâ fide* business has been very limited." What is, or is not, *bonâ fide*? When parties, who are better acquainted with the iron trade than the said correspondent appears to be, and who have ascertained the diminution of stock, think well to invest money in an article which is unnaturally low, and many shillings below the average price for the last few years, I confess I think such business is *bonâ fide*, but, perhaps, he may not do so; but in addition to such transactions, it will be found that, even in July, usually the dullest month in the year, the actual shipments will exceed those of July, 1850, by between 12,000 or 15,000 tons. I now leave your readers to form their own judgments on the subject.—A CONSTANT READER: *Glasgow, August 2.*

MINES.—We have a satisfactory report of the business in our mining market to make this week, although the nature of it differs materially from its character a few months since, when buyers showed an unusual avidity to invest in concerns of a purely speculative designation. At present that spirit has wholly evaporated, and in its place the amounts invested in dividend mines is large, and almost without limit where the stock can be obtained on suitable terms; whilst holders in new mines display great anxiety to realise on the best terms the market will afford. For the better class of advanced mines, or such as from time to time show good symptoms of ultimate success attending the workings, there is a fair inquiry, and business doing, in most cases, on terms of reciprocal interest between buyer and seller.

In the Metal Market,—Copper is in fair demand at former rates.—Lead in steady request.—English tin also remains in the same satisfactory state. The Dutch sale took place at Amsterdam on Tuesday, when 111,190 slabs of Banca Tin were disposed of in 24 lots; prices ruled from 47¼ to 48 flors. (about 80*l.* 5s.) per ton average, free on board at Rotterdam. The price last year for 117,760 slabs was 50¼ florins—30 slabs to the ton. This reduction in price leads some to fancy the market will rule at a lower rate for some time in consequence; but we entertain no such fears, looking at the small quantity and the increased demand; and we have good reason to believe that the mines in the East will not be able to bring forward even the reduced quantity next year; so that a permanent reduction in price need not be dreaded by our home tinners.—Quicksilver has fallen 3d. per lb.

The price of gold in bars (standard) is 3*l.* 17s. 9d. per oz.; silver in bars (ditto), 5s. 0¾d. per oz.; and new dollars, 4s. 11¼d. per oz.

We hope next week to be able to announce that the proposed arrangements making at the Hall of Commerce for the Mining Exchange will be satisfactorily settled, so as to ensure the perfect approbation of the subscribers, in which case we calculate on a considerable addition to their numbers. There is ample room for their accommodation, and, once placed on a proper footing, business will progress in regular order, which is a desideratum long wished for.

The London imports for the week comprise—from Hamburgh, 990 plates spelter; Carthagena, 1990 pigs lead; Ceylon, 363 casks, 132 barrels, and 35 boxes plumbago, 10 bundles steel; Antwerp, 108 casks zinc; Sydney, 130 ingots 4 half ingots copper, 79 tons 2 casks copper regulus, 2½ bags copper ore, 19 tons copper slag; Amsterdam, 300 slabs tin; Ostend, 3375 ingots copper; Stettin, 13,886 plates zinc; Malaga, 147 pigs lead, 76 barrels nickel ore; Singapore, 2449 slabs tin; Callao, 6 bars of silver; and from Rouen, 31 casks copperas.

At Liverpool—from Antwerp, 36 casks zinc; Rotterdam, 76 casks manganese; New Orleans, 80 tons pig-iron.

At Hull—from Hamburg, 5294 plates spelter, and 25 casks plumbago; Riga, 133 plates spelter.

The Lisburne Mines sold, at Aberystwith, on Monday, 120 tons of lead ore, at 11*l.* 1s. 6d., and 80 tons ditto, at 10*l.* 10s. per ton.

The Roughtengill Mine (Cumberland) has sold 6 tons of lead ore at 10*l.* 5s., and 25 tons at 8*l.* 10s. per ton.

Driggith Mine sold 22 tons of lead ore—12 tons at 12*l.* per ton, and 10 at 7*l.* per ton.

Black Craig sold 39 tons lead ore, at 9*l.* 12s.; Daltammie, 3 tons, at 9*l.* 12s.; Cairnsmore, 40 tons, at 10*l.* 0s. 6d. per ton, to Newton, Keates, and Co.; and Machynlleth, 40 tons, at 10*l.* 18s. 6d., to Walker and Co.

Georgia Consols have sold two parcels of black tin—the largest realised 52*l.* 10s., and the other 33*l.* 10s. per ton.

At Wheal Basset account meeting, on Tuesday, the accounts showed copper ore sold May 1 and June 5, 4275*l.* 5s. 8d.; tin ore sold, May 17, June 7, and July 5, 1053*l.* 10s. 11d.; sundry discounts for cash payments, 8*l.* 10s. 11d. = 6337*l.* 7s. 6d.—By labour cost for May and June months, 2202*l.* 17s. 11d.; merchants' bills, 1038*l.* 17s. 10d.; lords' 421*l.* 18*l.* 5d.: leaves a balance of profit on the two months' working, 2673*l.* 13s. 4d.; add balance in hand last account, 2217*l.* 19s. 3d. = 4891*l.* 12s. 7d. in hand: less dividend now made, 2560*l.*, and May and June costs at the south mine, 371*l.* 15s. 7d.: leaves balance to next account, 1959*l.* 17s. On Giesler's lode, the 40 east will produce 4 tons of copper ore per fm.; the 60 west and rise above 3 tons each, and the 70 west 1 ton per fm. On Williams's lode, the 50 east will yield 2½ tons of copper ore per fm., and the 20 east 1 ton. On the south lode, the 50 east yields 3 tons, and the 40 east 2 tons of copper ore per fm. The great lode west is yielding 1 ton per fathom; other levels driving on this lode are at present poor. In the tin department at Carnkie, the levels and pitches are producing a fair quantity of tinstuff, but not so good as they were two months since. The stopes on Williams's lode are producing a fair quantity of good quality copper ore. The engine-house is up, and part of the engine delivered; in one month it will be set to work. A dividend of 10*l.* per share was made.

From Tincroft Mines, the following gratifying statement of costs and returns, for the month of May, has been received:—

Copper ore, sold 3d July	£3247	16	7
Black tin, sold 30th July	886	19	0
Arsenic, sold 24th July	78	6	2
Total	£4213	1	9
Costs thereon	2879	17	9
Showing a profit of	£1333	4	0

At this rate the arrears on the Cost-book will be speedily run off.

At East Birch Tor special general meeting, on Monday (James Baker, Esq., in the chair), the resolutions making certain alterations in clauses 117 and 119 of the company's Deed of Settlement, as agreed to on the 7th July, were unanimously confirmed.

At the Tywarnhayle and Nancekuke meeting on Tuesday, the accounts showed—Tywarnhayle Mines cost for May and June, 3472*l.* 4s. 9d.; Nancekuke ditto, 517*l.* 14s. 2d. = 3989*l.* 18s. 11d.—By sale of copper and lead ores, 3329*l.* 13s. 3d.: showing loss, 660*l.* 5s. 8d.—balance in hand 17th June, 151*l.* 17s. 11d.: leaving balance against adventurers, 508*l.* 7s. 9d.

At West Wheal Towan meeting on Tuesday, the accounts showed—Balance from end of Feb., 506*l.* 1s. 2d.; March costs, 332*l.* 1s. 6d.; April, 300*l.* 10s. 11d.; May, 252*l.* 10s. 2d.; June, 1150*l.* 6s. 4d. = 2541*l.* 10s. 1d.—By copper ores sold, 102*l.* 2s. 2d.; two calls, 2000*l.*: leaving balance against adventurers, 439*l.* 7s. 11d.

At East Godolphin half-yearly meeting, on the 1st inst., the accounts showed—Labour cost from Jan. to end June, 942*l.* 11s. 4d.; merchants' bills, 401*l.* 1s. 9d.; tribute and dues, 57*l.* 3s. 11d. = 1400*l.* 17s.: less balance in hand last account, 178*l.* 19s. 2d.—Copper ore sold, Feb. and May, 261*l.* 5s. 11d.: leaving balance to next account, 960*l.* 11s. 11d., to discharge which, and prosecute the mine further, a call of 5*l.* per share (1280*l.*), was made. Gwedna lode westward has, for some time past, been disordered by a flookan, which has almost destroyed it, it having cut out the ore, and rendered the lode valueless. In the bottom of the 30 there are some good stones of ore, inducing them to persevere, and endeavour to see the next level, when the lode will be near to, or in, the engine-shaft, which at present is going down in a hard black killas. Nothing but depth, and getting under such killas, can prove remunerative to the shareholders.

At Penzance Consols meeting, on Thursday, a committee of the following gentlemen were formed, and powers delegated to them to fix on a qualified tin mining captain to inspect the mine, and report on the advisability of erecting an engine of suitable power, for giving it an effectual trial—viz.: Messrs. Halket, Sheldon, Mortimer, Mitchell, Carne, and Tripp; and they will select either Capts. Floyd, Burgan, or T. Richards.

At South Plain Wood half-yearly meeting, on the 30th July (Thomas Camplin, Esq., in the chair), the accounts showed—Balance in hand last account, 433*l.* 8s. 11d.; calls received, 658*l.*; other receipts, 3*l.* 10s. = 1094*l.* 18s. 11d.—Six months' costs and part of merchants' bills paid, 942*l.* 13s. 1d.: leaves balance in hand to the next account, 152*l.* 5s. 10d. Due upon calls, 110*l.* Merchants' bills unpaid, 123*l.* 7s. 1d. A call of 6s. per share was made, payable on the 11th inst., and all shares on which the calls are not paid within 21 days after the time fixed for payment, were declared to be duly forfeited, pursuant to the 15th rule upon the cost-book, to be sold by public auction or private contract, pursuant to the 21st rule. The report of Capt. M. Stephens will be found in our last Journal.

At West Wheal Seton bi-monthly meeting, on the 29th July, the accounts showed—Balance last account, 100*l.* 18s. 11d.; ore sold (less dues), 422*l.* 4s. 8d.; sundries received, 4*l.* 5s. 10d.; May call, 400*l.* = 927*l.* 9s. 5d.—To costs for May and June, 741*l.* 14s. 5d.: leaves balance in favour of adventurers to next account, 185*l.* 15s.

At Tremar Mine bi-monthly meeting, the costs for April, 47*l.* 6s. 1d., and May, 55*l.* 16s., were examined and allowed, and, to defray the same, a call of 5s. 10d. per share was made. The engine-shaft is down 10 fms. from surface, ground easy for sinking; the foundation of engine-house is taken out, and the building will be ready by the time the engine arrives.

At Perran St. George meeting, on Monday, the accounts showed a balance in favour of the adventurers of 1758*l.* 13s. 7d. No dividend, however, was declared, on account of the extra outlay for fixing machinery, &c.

At the Garreg two-monthly meeting, on Thursday, the accounts showed a balance in hand of 543*l.* 10s. 5d. A 31-inch cylinder steam-engine has been purchased for 175*l.*, exclusive of boiler, and which, it is expected, will be erected and put to work in about two months from this time.

At Bell and Lanarth meeting, on Monday, the accounts showed—Balance end December, 1850, 37*l.* 8s. 3d.; labour cost six months, ending June, 482*l.* 11s. 4d.; merchants' bills, 100*l.* 7s. 10d. = 620*l.* 7s. 5d.—By call of 1*l.* per share, 508*l.*: leaves balance against the mine, 112*l.* 7s. 5d. A call of 1*l.* per share was made. A special meeting is convened for the 18th inst., to consider the subject of working Penstruthal and Carvannal; The boundary shaft is down 33 fms.; the lode in the bottom is 5 ft. wide, and no north wall; it consists of mundic, peach, gossan, spar, and ore. This shaft will be down to the adit by the end of the month; 20 fms. south of this is a fine elvan course, underlaying towards the lode; they will intersect between the 40 and 50; the lode in the adit level is from 9 to 10 ft. wide—on the south side of which is a good branch of tin and gossan. Penstruthal's great deposit of copper ore was found parallel with the same elvan course.

At East Wheal Leisure meeting, on the 1st inst., the accounts showed—Balance last account, 523*l.* 9s. 10d.; costs for April, 507*l.* 16s. 1d.; May, 329*l.* 5s. 1d.; June, 508*l.* 7s. 2d. = 1868*l.* 18s. 2d.—By fourth and fifth calls, 1024*l.*; copper ore sold, 363*l.* 4s. 2d.: leaving balance against the adventurers, 481*l.* 14s. A call of 1*l.* per share was made, to be paid immediately, and a further one of 1*l.* in October. There are seven pitches working: 100 tons of ore are at surface, and 60 tons expected for the last month. The 10 west, on the north lode, has laid open some good tribute ground; the same level, west of Taylor's, has also been productive for about 17 fms. in length; the end at present is disordered by a small cross-course. The 27 west is about 8 fms. from Morcom's shaft, where the lode

is 3 ft. wide, very promising; the 27, east of Jewell's shaft, is turning out nearly 1 ton per fm.; the present end is letting out much water.

At Wheal Mary (Redruth) meeting on Tuesday, the accounts showed—Balance last account, 184*l.* 6s. 2d.; costs and merchants' bills, 980*l.* 6s. 2d. = 1164*l.* 12s. 4d.—By copper ore sold, 375*l.*; call in June, 371*l.* 5s.: leaving balance against mine, 418*l.* 7s. 4d. The abandonment of the mine, and immediate sale of engines and materials, was finally resolved upon.

At Great Wheal Leisure meeting on the 31st July, the accounts showed—Balance last account, 219*l.* 15s. 4d.; costs and merchants' bills, 230*l.* 15 9d. = 450*l.* 11s. 1d.—Call in April, 384*l.*; sundries, 3*l.* 19s. 7d.: leaving balance against mine, 62*l.* 11s. 6d.

At Wheal Daniel meeting on Monday, the accounts showed—Balance last account, 239*l.* 2s. 3d.; costs and merchants' bills for four months to end of June, 1174*l.* 16s. 11d. = 1413*l.* 19s. 2d.—By call, 1000*l.*; ore sold, 22*l.* 0s. 1d.: leaving balance against mine, 391*l.* 19s. 1d.

At West Tolgus the lode in the engine-shaft is improved.

At East Seton the engine commenced working above a fortnight since, and the mine drained 25 fm. below adit. They are now enabled to drive the 10 and 20 fm. levels. In the latter there is a good branch of ore.

Wheal Trefusis is also very much improved.

At the Polberrou Mines the yield of tin for May was 33¾ tons, and in June 27½ tons—total for two months, 51¼ tons. The pitches are looking quite as productive as for some time past.

At East Wheal Music the driving of the adit level is continued in search of other lodes; one near the south shaft is 1 ft. wide, kindly. There are several others, but at present small.

At Treleigh Consols Mine they have two improvements of importance; in the winze under the 90, on Christoe lode, the lode is 3 ft. wide, worth 30*l.* per fathom; and in the stopes above, to the west of Terrel's winze, the lode is 2½ ft. wide, worth 30*l.* per fathom.

At Heignston Down, the lode in the 55, east and west of Doidge's winze, is 5 ft. wide, worth from 5 to 6 tons of good ore per fm.

At Bodmin Wheal Mary, we are happy to learn, a fine lode has been cut in the 20 fm. level, from the bottom of which large stones of pale yellow ore have been broken: this lode (No. 6) appears to be making rich in depth; and the shaft being sunk to the 30, it will soon be cut in that level, when it is expected good returns will be made from it. Several tons of ore were broken from this lode last month, in a splendid gossan, at the back of the adit. This is altogether a recent discovery in the mine, therefore the cross-cut had not been extended at the 10, to intersect it.

At Treville, we understand the engine-shaft was sunk during the past month 3 fms. 1 ft., and the 22 driven south 5 fms. 2 ft.; the lead from the lode is put in a heap by itself, and will be rendered merchantable as soon as they are in a situation to dress it.

Balnoon Consols looks well: the lode in the 15 fm. level, west of flat-rod shaft, is worth full 30*l.* per fm.

At Carthew Consols, the mine is reported to be much improved of late. In the 85 north the lode has been intersected north of the slide—it being hove 4 ft. west; it is of a varied character, composed of copper 2 ft. wide—1½ ft. of which is solid ore; the rest is very good work. The south end in the 75 is holed to the middle shaft with a borer; a slide crossing the end causes disorder at present. The lode in the 65 is 2 ft. wide, very good work; the rise, which is about 8 fms. behind the end, is a very good lode of lead. The tributers are doing well.

At Wheal Penhale, in the end driving south, the lode is 4 ft. wide, yielding rich work for lead. A winze is sinking below, the lode is 1½ ft. wide, nearly all solid lead; but the water is troublesome, which impedes progress. The stopes south and north are showing well; and the tribute department is without alteration.

We have seen the list of applicants to whom the allotment of shares in West Camborne Mine has been made; and from the number of respectable names therein, we expect to learn shortly that they have commenced operations in this far-famed locality for productive mines.

We are informed that the discovery made in Peter Tavy and Mary Tavy does not answer the expectations that were entertained; the prices of shares, consequently, have fallen from 35*l.* to 10*l.* This should caution parties from being led away by flaming reports of lodes when first cut, as it always requires time to develope the value of new discoveries.

We regret to learn that cause should exist for dissatisfaction in the management of the Kenmare Mines: many valuable properties have been ruined from want of unanimity among those on whom their management has devolved. We are far from attributing wrong motives, but we have been informed that the reports have been diverted from the regular channel, and addressed to a director, as on *private* business—consequently, frequently remaining a sealed document for days, from not only the shareholders but the co-directors. This alone is a course that should be at once remedied, as alike detrimental to the property and those concerned—creating a want of confidence here, and a laxity of principle at the mines. All reports from the regular agents are official statements, and are the property of "one and all"—as much to the smallest shareholder as to the managing director; when an independent report is required, there is no occasion for secresy, but by whom, and for what purpose, the agent may be appointed, should not only be made known to the board but also to those on the mines. We say, act well together, as gentlemen, and create not a want of confidence, calculated to injure what there is every reason to be considered a fine property, but do all to promote harmony in your own councils, and let instructions and appointments emanate from the board of directors, and not any one individual. We are informed that Mr. Manby has resigned the secretaryship of the company. Mr. Manby, we believe, was the originator of the undertaking—at least, we know he was indefatigable in his endeavours to promote its establishment, and that its success was mainly owing to his exertions. We are glad, however, to find that the derangement of affairs is confined to home. Advices have been received from the mines, dated July 26, which state that the 36 and 27 fm. levels, west of Croker's shaft, are more favourable for driving; the lode in the rise not taken down. Lamb's winze is shortly expected to meet with the shoot of ore dipping down westward from the 17. The stopes in the back of the 36, east of Croker's shaft, are turning out good stones of rich ore. The water has been drawn out about 15 fms. deep on the forge lode; the excavations thus far are found to be very extensive. From Campbell's shaft and the end driving west a small quantity of rich ore has been extracted. The dressing floors are in order, and preparations made for the operation of rendering the ore marketable. But until the pitwork is altered, and Croker's sunk deeper, so as to open more orey ground, neither large or regular returns can be expected. The report received from Capt. Charles Thomas, after his inspection of these mines, being now in our possession, we may sum it up briefly in his concluding words—"From the rich quality of the ore, and small cost of dressing it, if operations are carried on judiciously and with economy, there is no reason to doubt but that a fair amount of interest may be realised for the capital required."

The Tavistock district appears destined to become, at no distant day, the great mineral field of the west of England. We have already stated that, under the far from euphonious name of "Wheal Gate-Post," a mineral discovery of great importance has been made in the virgin ground east of the town of Tavistock—a district hitherto almost totally unexplored. We have since learned that the results of very superficial exploration have been the discovery of several copper lodes, unexampled for their productiveness in rich grey and yellow ores at the present depth; and from their being immediately east of the Devon Great Consols, the lodes of which have not been worked on in any intermediate ground, the parties are confident of the identity of the main lodes. We understand arrangements have been made with highly-respectable parties in town for the vigorous prosecution of this extraordinary mine, and it only requires an inspection of the blocks of ore already raised, to satisfy the most sceptical of the remarkable character and value of this discovery. We expect to have some further details next week.

Transactions have been done in Alfred Consols, Bedford, Comfort, Devon Great Consols, Mining Company of Ireland, Tincroft, West Providence, Mary Ann, Trelawny, Tremayne, Wicklow, Clijah and Wentworth, Devon and Courtenay, East Buller, East Boringdon, Boringdon Park, Galt-y-Maen, Garreg, Heignston Downs, Merllyn, Treleigh, Tregorden, Tywarnhayle, Wheal Crebor, Langford, Venton, Zion, Williams, East Wheal Russell, Trethellan, South Tamar, Condurrow, and Treviskey.

In Foreign mines, shares have changed hands in Alten, Cobre, Copiapo, St. John del Rey, United Mexican, and National Brazilian.

From the Alten Mines advices have been received to the 16th July. Workings have been resumed in the 20 at Raipas, except the winze sunk on No. 11, which has some water in it. The produce for July was calculated to be 2 tons of copper. At the United Mines, the tributers on the back of Woodfall's lode have met with better prospects than of late. A slight improvement has also taken place in the Old Mine. The foot stope in Slungi's sink has shown a change for the better, the ore being of a superior quality. At Michell's the tributers are making some tolerable good returns of ore. At Mancur's the lode is promising, the tributers producing some small parcels of the usual good quality ore.

From Linares Mines they report that the lode in the 55 west is turning out from 2 to 2½ tons of ore per fathom. The 45, east of Shaw's shaft, 1 ton of ore per fathom. The 31 east has not been entirely cleared of stuff so as to reach under the old men's workings. The tribute pitches set for August are 15, to 40 men, at about the usual tribute. Other parts of the concern are as last reported. Lead weighed in to July 26, 46 tons 13 cwts.: total in stock, 760 tons 4 cwts. Pig-lead, 23 tons 17 cwts.: total in stock, 200 tons 7 cwts.

From the National Brazilian Mine report, dated 6th June, we learn that the rise has effected a communication with the winze, which has enabled them to commence stoping the ground east, where the lode is very large, and of rich produce—a small carumbei having produced 13½ grains of gold. Taking the lode at 80 carumbeis wide, it yields 15 oits. per load. The produce from washings has taken a start, the headskins giving 4 ozs. in 24 hours from a very indifferent supply of stone. Produce of Cocaes from 25th May to 4th June, mks. 9 1 0 25; Cuiaba, from 27th May to 6th June, 3 3 6 62 = mks. 12 4 7 15.

From Copenhagen, we learn that the expedition for exploring the mineral deposits of Greenland has now sailed, under the command of Mr. Lundt, who, it will be remembered, was some short period since in England, with the hopes of obtaining associates in his undertaking. The lodes consist of several varieties of copper, lead, and iron ores, as well as plumbago. The expedition was delayed on account of the Royal authorisation and the ministerial documents not being ready. Mr. Lundt has obtained the assistance of Mr. Friis, mining engineer of Kongsberg, and several miners. The vessel appointed for the service is the *Fürkloveret*, and is provisioned and equipped for passing the winter in that inhospitable climate.

Bank shares have met with a fair amount of business this week, additional confidence being felt with the passing over of the meetings, and prices are in all cases well sustained, whilst in some cases higher rates have been conceded. Union Bank of London shares have been in much request, and have risen considerably, the price being now firm at 14¾. The sales of the week comprise:—Bank of Australia (40*l.* paid), 35¾; British North American (50*l.* paid), 45¼, 45, ¼; London and Westminister (20*l.* paid), 28½ ex. div.; Provincial of Ireland (25*l.* paid), 43½; South Australia (25*l.* paid), 23¾, 24; Union of Australia (25*l.* paid), 35⅝ ex. div.; Union of London (10*l.* paid), 13¾, 14⅛, 14, ¼, ⅛, ex. div.

Prices of dock shares are steady, and St. Katharine stock has advanced 1*l.*, being now held at 78. Commercial stock is worth 84; East and West India, 141½ ex. div.; London, 112; Southampton, 17½.

Steam-boat shares are firm, and attracting more attention. Royal Mail Steam have experienced a decided advance, being marked 78, 78½, 80, and 79½. For Peninsular and Oriental the last price quoted was 68½, but the views of buyers and sellers are now rather dissimilar; the new shares, on which 5*l.* has been paid, are quoted at 9½. General Steam Navigation shares mark 27½, ½.

The market for Insurance shares has been a trifle less steady since our last notice. Clerical, Medical, and General Life, and Royal Exchange shares are better, whilst British Commercial are not quite so firmly held.

Shares in the General Reversionary and Investment Society are quoted at 92 to 93; Equitable Reversionary, 109⅛; London Reversionary, 44; Reversionary Interest Society, 10⅛ ex. div.

Miscellaneous shares are quoted as follows in the official list:—Assam Tea Company, 8; Australian Agricultural, 15; Australian Trust, 20; Anglo-Mexican Mint, 25; Canada Company, 49 ex. div.; ditto, Five per Cent. Bonds, 95⅛; Hudson's Bay Stock, 205; Price's Patent Candle Company, 22; South Australian, 24⅛; Van Diemen's Land, 1.

RAILWAY TRAFFIC.

The aggregate traffic on railways in the United Kingdom, from the 1st of January to the 2d of August inclusive, amounted to 8,252,064*l.*; corresponding period of 1850, to 7,219,963*l.*; corresponding period of 1849, to 6,339,888*l.*; and in 1848, to 5,678,457*l.*—showing an increase in 1851 over the corresponding period of 1850 of 1,032,101*l.*; an increase in 1850 over the corresponding period of 1849 of 880,075*l.*; and in 1849 over the same period of 1848 of 661,431*l.* The traffic receipts for the above period averaged in 1851, 1310*l.* per mile; in 1850, 1320*l.* per mile; in 1849, 1371*l.* per mile; and in 1848 they averaged 1521*l.* The traffic receipts on railways during the week ending the 2d of August, amounted to 350,936*l.*, being at the rate of 55*l.* per mile per week, and exceeding by 57,329*l.* the receipts of the corresponding week in 1850. The gross receipts of eight railways having their termini in the metropolis amounted to 187,896*l.* for the week ending the 2d of August, and for the corresponding week of last year to 138,085*l.*—showing an increase of 49,811*l.* The increase on the Eastern Counties Railway amounted to 580*l.*; on the Great Western to 10,968*l.*; on the Great Northern to 10,491*l.* (chiefly in consequence of the line being in operation between London and Peterborough, which was not the case at the corresponding period of last year); on the London and Blackwall to 357*l.*; on the London, Brighton, and South Coast to 2161*l.*; on the London and North-Western to 15,069*l.*; on the London and South-Western to 4748*l.*; and on the South-Eastern to 5437*l.* The aggregate increase, as above, was 49,811*l.*, being nearly 87 per cent. of the total increase of traffic on railways in the United Kingdom, and leaving but 13 per cent. increase on the other railways, the aggregate receipts on which are something less than those on the metropolitan lines.

MINING IN NORTH AMERICA.—Accounts from Lake Superior continue to afford evidence of the progress of mineral enterprise. A great proof of this is noticed in the settlement of Eagle Harbour, which is situated on a peninsula on the south-western shore of the lake, in the middle of the richest and largest copper mines, and forms the only eligible point as a place of shipment. Only two years ago the place was deserted. Further advices from explorers fully confirm the reports of the purity and inexhaustible character of the copper mines in this region. From the noted Cliff Mine specimens have been brought, some of which are pure copper, chipped from the mass, and others slightly tinctured with white quartz, all of which will yield 90 per cent. refined. The pure specimens were obtained 400 feet below the surface. Nearer the surface the quality decreases, the surface ore not yielding more than 10 per cent. Specimens of iron ore have also been procured from Carp River, which are said to yield 60 per cent., and to be of a very fine tough quality. Smelting works upon a large scale have been established at Detroit, to refine the ore as it comes down from the Lake mines, and fit it for market. The works are now in partial operation, and considerable quantities of ore are received there, which are stated to be superior in quality to the best English copper. A railroad from Lake Superior to Lake Michigan is spoken of—the distance being 50 miles over a level country. This project is designed to benefit the iron mines, as the copper ore would take the other route, the distance from these mines being more considerable, and the cost of transport consequently greater.

NEW TIN-SMELTING WORKS.—Mr. Thomas Boundy is now laying the foundation of a new tin-smelting works, at Cwmbwrla, Swansea.—*Cambrian.*

COALWHIPPERS' PORT OF LONDON BILL.—The amendments to this measure have been agreed to.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bate's West Hartley 13—Holywell 14—Ord's Main 12 6—Redheugh Main 11 6—Tanfield Moor 12 6—Tanfield Moor Bute's 12 6—Townley 13—Walker Primrose 12—West Hartley 14—West Wylam 12 6—Wall's-End Acorn Close 13 9—Brown 12 3—Northumberland 13 6—Riddell 13 6—Eden Main 14 3—Lambton Primrose 14 3—Belmont 14 3—Braddyll 15 3—Hetton 15 6—Haswell 15 6—Lambton 15 3—Lumley 13 9—Pensher 13 9—Russell's Hetton 15—Scarborough 13 9—Stewart's 15 6—Cassop 14 3—Hartlepool 15 6—Kelloe 14 9—South Hartlepool 14 6—Adelaide Tees 14 6—Backhouse 14—Maclean's Tees 13 6—Tees 15 3—West Cornforth 13 6—Cowpen Hartley 13 9—Derwentwater Hartley 13 9—Hartley 13 6—Nixon's Merthyr and Cardiff 21.—Ships at market, 111; sold, 71.

WEDNESDAY.—Davison's West Hartley 14—East Adair's Main 11 6—Holywell 14 3—Howard's West Hartley Netherton 14—Hartlepool West Hartley 13 6—Harvey Tanfield 12—North Percy Hartley 12 6—Ord's Main 12 6—Ravensworth West Hartley 13 9—Tanfield Moor 12 6—Tanfield Moor Butes 12 6—Townley 13—West Hartley 14—West Wylam 12 9—Wylam 13 6—Windsor Pontop 11 6—Wall's-End Brown 12 9—Harton 13 9—Hedley 13 9—Hilda 13—Northumberland 13 6—Original Gibson 13 6—Eden Main 14—Lambton Primrose 14—Belmont 14—Braddyll 15—Hetton 15—Haswell 15 3—Kepier Grange 14 3—Lambton 14 9—Russell's Hetton 14 6—Sunderland 12—Stewart's 15—Whitwell 13 3—Heugh Hall 14 3—Kelloe 14 6—South Hartlepool 14 3 and 14 6—Thornley 14—West Hartlepool 14 6—Adelaide Tees 14 3—Maclean's Tees 13 3—Richardson's Tees 13—Seymour Tees 13 6—Tees 15—West Cornforth 13 3—Birchgrove Graigola 19—Hartley 13 6—Nixon's Merthyr and Cardiff 21—Sidney's Hartley 14.—Ships at market, 205; sold, 103.

FRIDAY.—Bate's West Hartley 13—Davison's West Hartley 14—Jonassohn's Hartley 12 6—Tanfield Moor 12 6—West Wylam 12 9—Wall's-End Gosforth 13 9—Hedley 13 9—Hilda 13—Original Gibson 13 6—Eden Main 14—Braddyll 15—Hetton 15—Haswell 15—Lambton 14 9—Pensher 13 6 - Russell's Hetton 14 6—Sunderland 12—Caradoc 14 9—Denison 13 6 and 13 9—Heugh Hall 14—Kelloe 14 3—South Hartlepool 14 3—South Kelloe 14—Whitworth 12 6—Adelaide Tees 14 3—Maclean's Tees 13 3—Seymour Tees 13 6—South Durham 13 6—Tees 15—Birchgrove Graigola 19—Cowpen Hartley 14 6—Nixon's Merthyr and Cardiff 21.—Ships at market, 115; sold, 63.

Delivery of coals, &c., in the port of London during the month of July:—

Newcastle	*Ships*	274	*Tons* 83,132
Sunderland		106	30,251
Seaham		129	31,266
Stockton, Middlesbro', &c.		186	46,812
Blyth		40	8,307
Scotch		4	692
Welsh		57	13,953
Yorkshire, &c.		9	445
Small coal		7	1,806
Culm		1	111
Cinders		3	153
Total imported in July, 1851		816	216,928
Imported in July, 1850			303,539

Inland coals brought by canal, in the month of June, 1851, upon which the City's and other dues were received ..... *Tons* 899¾

Inland coals brought by railway, the City's and other dues upon which were paid into the Chamber in the month of July, 1851 139194

Comparative Statement of 1850 *and* 1851.

Imported from January 1 to July 31, 1850	*Ships*	6967	1,951,325 *tons.*
Imported from January 1 to July 31, 1851	,,	6365	1,744,455 ,,
Decrease in the present year	,,	602	206,870 ,,

New Patents.

LIST OF PATENTS GRANTED DURING THE PAST WEEK.

E. de Mornay, Mark-lane, for improvements in machinery for crushing sugar canes, and in apparatus for evaporating saccharine fluids.

E. and R. M. Deeley, Andmand Bank, Stafford, for certain improvements in the construction of furnaces for the manufacture of glass.

R. H. Greg, Manchester, and D. Bowlas, Beddish, for certain improvements in machinery or apparatus for manufacturing weavers' healds or harness.

L. Bunn, Walbrook, for improvements in the manufacture of kamptulicon.

A. R. le Moire de Normandy, Judd-street, and R. Fell, City-road, for improved methods of obtaining fresh water from salt water, and of concentrating sulphuric acid.

L. Bissell, New York, for certain new and useful improvements in the means of sustaining travelling carriages and other vehicles, which improvements are applicable to other like purposes.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

Cox and Wilson, Oldbury, Oxfordshire, travelling label.—C. H. Wagnor, Birmingham, "The Flexibility Regulator" (penholder).—W. Steer, St. John's-wood, manifold-bladed razor.—J. Griffiths, Liverpool, apparatus for opening, closing, and fastening skylights.—G. Granger, Worcester, steam saucepan.—W. Card, Westminster, Card's "Melodian," or flute tuner.—T. Melling, Ramhill Iron-Works, Lancaster, moulding box.—J. Whitworth, Birmingham, button.—S. Wilson, Glasgow, life-preserving travelling bag.—D. Adamson and Co., Hyde, Chester, multitubular boiler.

PROVISIONAL REGISTRATIONS.

J. Coxon, Paddington, diagonnally-seated omnibus.—W. Green, Paddington, safety cash drawer or model till.—J. Taylor, Birmingham, dress fastening.—*Mechanics' Magazine.*

A SUCCESSFUL STEAM-SHIP.—The *Georgia*, of Law's Chagres line, is among the most successful of the large fleet of steam-ships sailing from this port. During last year, commencing with July 9, she made regular monthly passages, without any detention for repair, arriving here on or near the 9th of each month. She traversed at least 48,000 miles, transported between 9000 and 10,000 passengers, of whom about 3400 were landed at this port; and brought to New York, as nearly as can be judged, somewhere near $5,000,000 in specie and gold dust. Of the latter, however, some other steamers have brought a much larger quantity. The *Cherokee*, for instance, in the course of five months, brought about $8,000,000.—*New York Journal of Commerce.*

TO MINE PROPRIETORS, WATER-WORK AND LAND-DRAINAGE COMPANIES, CONTRACTORS, MANUFACTURERS, AND OTHERS.

GREAT BRITAIN STEAM-SHIP.—The PROPRIETORS of this SHIP desire TENDERS for the WHOLE (or for any definite section, that would not prejudice the entirety of the remainder) of her STEAM MACHINERY, as originally constructed, consisting of FOUR 88-inch CYLINDERS, of 6-feet stroke, with pistons and rods, air-pumps and condensers, connecting-rods and guides, and all the detail of nozzle and valve gearing, necessary to render each pair of cylinders complete in themselves, from the pistons to the crank-pins.

Apply to Mr. Croome, civil engineer, or Capt. Mathews, on board the vessel, Sandon Graving Dock; or Gibbs, Bright, & Co., Liverpool.

LEAD ORES.

Sold at Aberystwith, on the 4th August.

Mines.	*Tons.*	*Price p. Ton.*	*Purchasers.*
East Logylas	60	£11 1 6	R. Michell & Son.
ditto	60	11 1 6	Panther Smelting Co.
Frongoch	80	10 10 0	Newton, Keates, & Co.
Sold at the Mine, on the 4th of August.			
Driggith	12	£12 0 0	Locke, Blackett, & Co.
ditto	10	7 0 0	ditto
Ticketings at Bagillt, on the 5th of August.			
Black Craig	39	£9 12 0	Newton, Keates, & Co.
Daltammie	3	9 12 0	ditto
Cairnsmore	40	10 0 6	ditto
Machynlleth	40	10 18 6	Walker, Parker, & Co.
Sold at Cumberland, on the 6th August.			
Roughtengill	6	£10 5 0	—
ditto	25	8 10 0	—
Sold at the Mine.			
East Tamar Consols	72	£12 15 6	T. Somers.
Bwlch Consols	35	13 6 6	Newton, Keates, & Co.
South Tamar	60	16 6 6	T. Somers.

BLACK TIN

Sold at Chyandour Smelting-House, on the 5th August.

Mine.	*Tons*	*c. qr. lbs.*	*Price p. Ton.*	*Amount.*	*Purchasers.*
Georgia Consols	6	0 1 20	£52 10 0	£313 2 0	Bolitho & Sons.
ditto	1	2 1 14	53 10 0	37 9 6	ditto
Total amount of money				£350 11s. 6d.	
Millpool	1	4 3 18	£42 15 0	—	ditto

COPPER ORES.

Sampled July 23, and Sold at Andrew's Hotel, Redruth, August 7.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Tywarnhayle	120	£2 18 6	Par Consols	47	£5 7 0
ditto	110	3 6 6	ditto	3	27 10 0
ditto	79	2 6 0	Alfred Consols	63	6 15 0
ditto	75	2 6 0	ditto	56	5 19 0
ditto	54	7 16 0	ditto	49	5 15 6
ditto	40	1 12 6	ditto	27	6 5 0
ditto	31	4 6 0	ditto	18	14 7 6
ditto	30	2 14 0	West Wh. Treasury	50	4 14 6
Nancekuke	58	3 12 6	ditto	48	3 16 6
ditto	9	1 2 6	ditto	42	10 12 0
Carn Brea	73	3 9 0	West Fowey Con.	118	5 1 6
ditto	72	6 9 6	Polberrow	109	2 11 0
ditto	71	5 9 6	Levant	58	1 8 0
ditto	70	4 6 6	ditto	42	9 16 0
ditto	55	1 17 6	West Wheal Seton	55	3 12 0
ditto	51	5 1 0	Wheal Agar	28	4 4 6
ditto	32	6 2 6	ditto	23	6 0 0
ditto	28	3 8 0	Hawk's Point	34	4 3 0
Wheal Buller	95	5 14 6	ditto	13	0 18 0
ditto	89	4 14 0	Wellington	38	3 11 0
ditto	67	4 18 0	Copper Bottom	31	4 0 6
ditto	63	4 12 0	Wh. Mary, Bodmin	30	3 18 0
ditto	61	5 4 0	Trelyon Consols	20	8 5 6
ditto	58	7 18 0	St. Aubyn & Grylls	19	6 9 0
Par Consols	99	8 2 0	Wh. Prosper	12	3 16 0
ditto	95	6 19 0	Trenow Consols	4	6 14 0
ditto	52	10 6 0	East Wh. Squire	1	15 12 0

TOTAL PRODUCE.

Tywarnhayle, Nancekuke	606	£1991 16 6	Wheal Agar	51	£256 6 0
Carn Brea	452	2061 8 0	Hawk's Point	47	152 16 0
Wheal Buller	433	2355 13 6	Wellington	38	134 18 0
Par Consols	296	2331 14 0	Copper Bottom	31	124 15 6
Alfred Consols	213	1468 18 6	Wh. Mary, Bodmin	30	117 0 0
West Wh. Treasury	140	865 1 0	Trelyon Consols	20	165 10 0
West Fowey Cons.	118	598 17 0	St. Aubyn & Grylls	19	122 11 0
Polberrow	109	277 19 0	Wheal Prosper	12	45 12 0
Levant	100	492 16 0	Trenow Consols	4	26 16 0
West Wheal Seton	55	198 0 0	East Wheal Squire	1	15 12 0

Average Standard ..... £102 4 0 | Average Produce 7¾
Average Price per ton £4 19 0
Quantity of Ore ..... 2775 tons | Quantity of Fine Copper, 209 tons 14 cwts.
Amount of Money £13,804 0 0
LAST SALE.—Average Standard ..... £103 10 0.—Average Produce 7¾
Standard of corresponding sale last month, 99*l.* 14s.—Produce, 8¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	203	£947 19 8
Vivian and Sons	491	2503 15 0
Freeman and Co.	255	1188 0 3
Grenfell and Sons	403	1707 18 11
Sims, Willyams, and Co.	364	1475 11 11
Williams, Foster, and Co.	540	3541 8 3
Schneider and Co.	231	1018 0 6
Mason and Elkington	278	1421 10 6
Total tons	2775	£13,804 0 0

NO SALE on Thursday next, August 14.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria 1631—West Caradon 350—Mark Valley 226—Fowey Consols 220—Wheal Friendship 200—Holmbush 152—Phœnix Mines 150—Bedford United Mines 141—West Wheal Jewel 61—Creeg Braws 40—Wheal Gorland 12.—Total, 3183 tons.

COMPARATIVE AVERAGES OF THE WEEKLY SALES OF COPPER ORES FOR NINE YEARS, TO THE SECOND SALE FOR AUGUST, 1851.

Years.	*Tons.*	*Produce.*	*Amount.*	*Standard.*	*Cop. Ore.*	*Price Cake Cop.*
1842	2023	7¾	£12,086 10 0	£112 8	£77 0	£87 to 89
1843	2564	7¾	13,863 19 0	103 7	68 10	78 to 80
1844	2899	7¾	15,327 1 6	103 5	67 19	83 to 84
1845	2866	7¾	15,264 17 6	111 14	73 14	88¼ to 91¼
1846	2529	7¾	12,959 11 0	101 15	66 5	93 to 96
1847	2588	8¼	15,488 18 0	106 16	73 4	96 to 101
1848	1355	9¼	6,767 7 0	88 10	51 19	79¼ to 82¼
1849	2595	8¼	14,363 0 6	95 19	64 5	79¼
1850	2882	8¾	15,236 4 0	96 9	63 9	84

At SWANSEA, for Sale 12th August.—Cobre, 100, 95, 92, 51, 40, 48—Cuba, 121, 89, 55—Knockmahon 110, 61, 50—Berehaven, 124, 84—Burra Burra, 47, 45—Kaw-aw, 60, 15—Ballymurtagh, 66, 5—Tungkillo, 3.—Total, 1361 tons (21 cwts.)

VAUXHALL.—BENEFIT of Mr. R. WARDELL (the director), WEDNESDAY, 13th August, when will be presented the greatest novelty ever produced in England—A GRAND ÆRONAUTIC RACE by THREE BALLOONS, with which Mrs. Graham, the celebrated female æronaut, Mr. H. Bell, and a third æronaut of celebrity, will make ascents, all of whom have volunteered their gratuitous services for this occasion. An entire change of performances in every department—Immense extraneous Equestrian Talent in the Circus—Double display of Fireworks—Enormously increased Illuminations—Extensively augmented Orchestra, conducted by Arban—Extra Bands, with a host of unsurpassed Entertainment.—Admission Half-a-Crown; Doors open at Six o'clock: The Balloon Race to take place at Seven o'clock.

Monday, Tuesday, Thursday, Friday, and Saturday, magnificent GALAS and FÊTES, with all the extraordinary attractions of this inimitable establishment. The two greatest Equestrians in the World, Hernandez and Palmyra Annato—Madame Antonio's terrific Rope Ascent—Arban's splendid Band for Concert and Ball—Foucault's marvellous Fire and Water Sports, &c.—Gorgeous Illuminations and Brilliant Fireworks.—The Gardens are open every Evening (on ordinary nights) at 8, on Saturdays at 7—Fireworks at 10.

NOTICES TO CORRESPONDENTS.

FOWEY CONSOLS.—"An Adventurer" is indignant with us for not publishing his letter in last week's Journal, and accuses us of "partiality" in withholding his reasons for the displacement of Capt. Davis—the chief of which was, we may state, that his duties could be as efficiently performed by one of the clerks now employed on the mine, and his salary thereby saved. We are glad that our correspondent has determined on addressing the shareholders by circular, and will endeavour to get a special meeting called, for the purpose of "reforming the establishment." "An Adventurer" will then find, what he does not appear now to know, that the agents and miners at Fowey Consols are among the most efficient in the country, and whose salaries are not at all above the average. We expect that "An Adventurer" will prove rather a sorry meddler, than a useful reformer, and, with his co-adventurers, will have to regret the part he is acting. Let well alone.

MINING IN IRELAND.—The communication of "A True Friend of Erin" shall not be lost sight of: the present is not the time, however, to publish a letter which must prove so important to the undertaking. We believe the scheme will not be brought before the public as at present constituted—and, perhaps, some of the doubts and queries of our correspondent may be superseded by alterations made in the prospectus.

"A. W. B." (Devonport).—The custom of tin bounding is very ancient, and although from many causes it has in modern times become nearly inoperative, it has been recognised by recent statutes and decisions as the title by which some property is held, and more may probably be still acquired by it. The custom, as described in the most recent case, Rogers *v.* Brenton (10 Q. B. Rep., 26), is that any person may enter on the waste land of another in Cornwall, and mark out by four-cornered boundaries a certain area, consisting of 24 turves or stones, six to each corner. A written description of the plot of land so marked, with metes and bounds, and the name of the person for whose use the proceeding is taken, is recorded in the Stannary Court, and proclaimed at three successive courts, held at stated intervals. If no objection is successfully made by any other person, the Court awards a writ to the bailiff to deliver possession of the said bounds to the bounder, who then has the exclusive right to search for and work all the tin ore within the prescribed limits. The right descends to executors, and may be preserved for any length of time by paying toll, or by yearly renewing the bounds, and giving the proper notice. The custom is not peculiar to Cornwall, but strongly resembles ancient forms in working mines in Derbyshire, Forest of Dean, France, and other parts of Europe.

"H. D. W."—"Present prices" in our Share List are those supplied to us by the various brokers and dealers regularly every week, and may be taken to be the prices at which business has been really done, or at what they are willing to buy or sell, as the case may be. The Mining Exchange having now commenced business in suitable premises at the Hall of Commerce will, it is expected, regulate the weekly price of shares from actual dealings made therein, which will render the list more correct than hitherto.

WHEAL MARY (REDRUTH).—We have received full particulars from "A Loser" in this concern; and as one of the principal London shareholders is now upon the spot, and attended the meeting held there on Tuesday, the report he will have made to his co-adventurers will doubtless be satisfactory. Our correspondent at Redruth informs us that the shareholders there wishing to abandon the mine, have named a price at which they will surrender their shares, and given a week for reply; so that there is some chance of arrangement, should the London party still wish to see the concern at a deeper level.

"T. S." (Baker-street).—A description of some of the foreign mining machinery in the Exhibition will shortly appear in the Journal. Our attention has long since been directed to it, but press of matter has compelled us to postpone it.

"K." (Loughborough).—The reports in question, coming from two distinct sources, occasioned their being twice inserted—the one in both cases having "West" added thereto: the price paid has been corrected.

HOLYFORD MINES.—We are again compelled to postpone the report of Mr. J. Taylor, Jun.—but it shall certainly appear in our next Journal.

"An Inquirer" (Hull) must consult a mine agent of the locality, or a sharebroker: we never give an opinion, or advise as to any mine adventure.

"Philo-Galileus" (Tower-hill).—The astronomical tables of India, of great antiquity, make the tropical year within $1'\,53''$ of our best tables; others, constructed 3102 years B. C., are equally accurate, and the coincidences are astonishing, showing the great length of time their observations must have been previously made, and the perfection to which their instruments had arrived. Their place of the sun agrees with ours by $46'\,54''$, and the moon within, and from some anomalies recently discovered in modern tables, it is not improbable they were right. Their calculations of the places of the planets agree in the most minute particulars. The Egyptians in 4070 years, from Vulcan to Alexander, had accurately observed 373 eclipses of the sun and 832 of the moon. The eclipse on July 28 was not total; but at the greatest obscuration, about three o'clock, a crescent of light was visible on the sun's eastern limb. It commenced about two, and terminated at a quarter past four o'clock.

"M." (Gloucester) is informed that neither of the two mines he names are at present paying cost, consequently a call may be expected from each of them. We are not aware that the third-named mine has commenced operations.

G. Baines (Leeds).—Argentiferous arsenical iron is whiter than pure arsenical iron, being of a somewhat silvery white, but agrees with it in all characters, except that it contains from 1 to 15 per cent. of silver; that of Andreasburg consists of 44 iron, 35 arsenic, 13 silver, and 4 antimony. At Freyberg and Braunsdorf, in Saxony, it is worked for the silver it contains. According to Broignart, arsenical iron sometimes contains gold, and even cobalt, in small proportions, without any sensible alteration of external character.

"C. P. C."—NORTH WHEAL BATTERY (TIN), PENZANCE.—Perhaps some friend in this locality will enable us to answer our correspondent's question—"What is doing there?"

"G. F. M." (Lynn).—There are but two so-called duchies in England, those of Lancaster and Cornwall. The Queen is Duchess of Lancaster, it being always attached to the Crown; while the Duchy of Cornwall is the appanage of the Prince of Wales; in the event of there being no heir apparent, the sovereign enjoys the revenues.

"W. C." is informed that he conjectures rightly; Mr. Thomas Curry, of Bond court, Walbrook (long connected with Tresavean, and most mines that the late Capt. Thos. Teague had the management of in Cornwall), died about a month back, after an illness of some duration.

EAST WHEAL RASHLEIGH.—Sir: It will be impossible for you to keep a correct list of prices when disinterested persons take upon themselves to alter it, with no other motive but from prejudice. The price of East Wheal Rashleigh has been lowered in your last Journal, when not a share has been transferred by any one since the week previous but by myself, and that at a higher price than stated.—THE PURSER: *August* 6.

"M. W." (Leith).—A letter addressed to our office for the inventor will reach him.

"A Shareholder" (Bath).—The matter is under consideration.

"B. S." (Chatham-place).—Messrs. Peto and Brassey are the contractors for the railroad from Christiania to Lake Miosen. S. Morton Peto, Esq., M.P., started for that capital on Saturday, the 2d inst.

"C." (Paris).—We are not informed whether the new company for working the mines of the late Asturian Company have received their transfer; disputes are, we believe, still pending between the liquidators, trustees, and ex-directors. Had this company been registered, much of the mismanagement which has so justly been complained of would have been avoided. Through the neglect of this proper precaution, the Guadalcanal was dissolved. The Linares Association, we are glad to perceive, are about to register. There was one rabid dissentient at the meeting; but when the resolution was put, the amount of shares against him and his party was as ten to one.

We have in type—Capt. Matthew Francis's paper, "Is Mining a Lottery?"—Mr. David Mushet on Mr. Craddock's Improvements in Steam-power—the Manufacture of Needles—Mr. W. Fairbairn on the Construction of Iron Vessels exposed to Severe Strain.

The Cost-Book System.

Having repeated applications for particulars respecting the Cost-book System, we have reprinted, as a pamphlet, the paper descriptive of its principles and practice, which appeared in the *Mining Journal*. Copies can be procured through any bookseller or newsman, or at our office, price 6d.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

*** It is particularly requested that all communications may be addressed—
TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.
And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, AUGUST 9, 1851.

THE MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all newsagents, at the Royal Exchange, and other parts of London.

In our last Journal we alluded to the case of DOE DEM TURNER *v.* ASH, which was tried at the Derby Assizes, on 28th July. The mining laws affecting Derbyshire are, like those of Cornwall, purely local; there all similarity ends, the former being under the Duchy of Lancaster. The custom of the district is for the discoverer of a new mine to summon the barmaster to inspect it; if he is satisfied that it is a new vein, the finder presents a dish of ore as due to the Crown, and thereupon the barmaster sets out a "mere." These "meres" extend 32 yards east and 32 yards west from the place where the dish of ore is raised, and then the "mere" is considered freed. They have, in general, a puritanical nomenclature, though in some instances a different style is adopted. In this case the plaintiff had become insolvent, and her creditors proceeded against her in the great Barmote Court. The practice of this court appears to have been that the creditor brings his plaint, and swears the debt is due. The judges, who are called the grand jury, are 24 in number; they examine the witnesses one by one, in each others absence, and that of the plaintiff and defendant, all parties being sworn to secrecy. If the defendants wish to prove payment, they bring a cross bill, which the grand jury either ignore or find to be true. In the latter case they order payment to be made within ten days, or the defendants lose their shares in the mines. Disobedience of that order, after notice, is followed by a seizure by the barmaster, and the delivery of the mines. This was allowed upon a precedent which had occurred in the year 1750. Proceedings were likewise taken in the little Barmote Court, but here, as it did not appear that the parties were the same, the ground of defence failed. The custom to be tried before the judge was whether the practice to examine witnesses in secret was legal or not. The jury stated that though it had been the practice for some time, it was a mistake. We could quote several instances of the proceedings of these courts, some of the laws of which are as ancient as the time of Edward I., and although we have no doubt they were applicable at that period, when "might was right," yet surely, in the nineteenth century, it is not wise to retain the remnants of a barbarous feudalism. Within the last few months the draft of a bill has been prepared, in order to amend the laws, which we fully noticed in our Journal of the 28th June. Many clauses in this gave great umbrage to the miners and labourers engaged in the High Peak district, and much dissatisfaction was expressed at some of its provisions, more especially an enactment which would have given the owner of any land under which a lead mine existed the power to claim and take the same into his own possession, in case the mine should be three weeks unwrought. The bill having excited great attention, three weeks since a private meeting was held at Bakewell, and last week a public meeting was held at the Town Hall of that place. Great numbers of miners attended the meeting; from Bradwell about 200, from Great and Little Hucklow about 100, from Eyam and Foolow upwards of 100, and about 50 from Castleton. The meeting was attended by several influental gentlemen of the district, among whom was the Hon. G. CAVENDISH, Messrs. MILNES, NEWBOLD, WYATT, FENTEM, HUBBERSTEY, CURREY, ROGERS, &c.

The clauses of the amended bill are—the steward is empowered to make bye-laws, the Chancellor of the Duchy having power to confirm or disallow such laws, they being previously inserted three weeks in the newspapers; all mining produce, except lead ore, to be, as heretofore, the property of the landowner, and not to be removed without his consent. The clauses of the ancient laws regarding the roads and running streams were not in the slightest degree to be interfered with, but no new roads for the buddling old hillocks could be set out, except by arrangement with the landowner. Any one removing ore from his mine, not having been legally measured by the barmaster, to forfeit the right to his mine. Another change in the method of enforcing the payment of fines inflicted by Barmote Courts is that at present, and in all past times, the fines alluded to could only be by distress and sale of the *mineral property* of the defaulter; and, as a matter of course, if the offender possessed *no mineral property*, the fine was to all intents and purposes nugatory, and he escaped with perfect impunity; by the new Act the amount can be recovered against him in the district County Court. The Duke of Lancaster's per centage would remain the same, and the measure known as a "dish" would still continue to contain 15 pints of water. Any vein standing unwrought, not being hindered by water and want of air, might be forfeited, but not until three weeks' notice had been given to the miner in possession to proceed with his workings; but forfeiture not to take place if he had used diligent means to work his mine, and was prevented by adverse causes. No ground could be set out by the miner until ore had been found, and the usual "freeing dish" paid; working a mine without so doing would render it liable to be forfeited to the lessee under the Duchy. The fees in the courts to be on a moderate scale; and in case justice could not be obtained by an impartial trial at the Barmote Court, proceedings might be removed by *certiorari* into the upper tribunals. Although we believe that the proposed amendments will more clearly define the rights of the miners, and, by its enactments, the ancient, indefinite, and unintelligible custom now existing will be rendered clear and definite, and thus be the means of preventing many disputes and much litigation, and though vastly superior, we consider, to the draft intended to be introduced into Parliament (see *Mining Journal*, June 28), yet, in our opinion, and that of several practical men, it is, as yet, not comprehensive enough; it must, however, be looked upon as a step in the right direction.

At present, the mineral laws of this district are so obscure, that in disputes between the miner and the landed proprietor, the miner, if aggrieved, is too frequently compelled to seek redress at a vexatious and frequently ruinous expenditure in the higher courts. This is not totally obviated here; and it would tend to check litigation, if a code of laws could be formed which would render decisions in the mineral courts final, and no appeal to be allowed from them. The framers of this bill, as is generally the case, are solicitors; and it would be too much to suppose that they would suggest any enactment which would injure their profession. The system of mineral courts in Germany, independent of the legal tribunals, presided over by the officials of the Berg-amt, the Berg-raad being the higher instance, have been sufficient to decide all mineral disputes in Germany, without appeal to the law. Why should not the same system work well in England? By the introduction of the Stannary, Barmote Courts, &c., such must have been the intention of our ancestors. These, no doubt, in their day were efficient; while the continental mining courts have progressed with the times these have remained stationery, and, to be rendered intelligible, require a nice knowledge of the technicalities of the law, while at the same time they encourage and foster its chicaneries.

We make no further comments at present. The bill was read a third time, and passed on Tuesday last; it received the Royal Assent on Thursday. The next six months will prove how it works; it is a decided amelioration on the old system. Its defects will have a fair trial, and can be easily remedied next session.

Although, as repeatedly insisted on in our columns, the bill for authorising the appointment by Government of colliery inspectors, passed in August last, was anything but efficient, or what the colliers and their friends had a right to expect, we are glad to find that the subject has aroused the attention of parties in the proper quarter; and we have no doubt that, although up to the present time no compulsory powers have been placed at the disposal of the inspectors, the step has been productive of good: the suggestions unassumingly made by the inspectors have generally been promptly and willingly attended to by coalowners and agents, and although deplorable explosions, and other accidents in collieries have taken, and still will take place, a great change for the better is undoubtedly in progress. In the House of Lords, as we stated in our last, Lord WHARNCLIFFE moved for a return of the names of the inspectors appointed under the Act of last session for the inspection of collieries, together with the districts and salaries assigned them, and the instructions issued for their guidance. It would be, he said, in their lordships' recollection that in the year 1849 a committee was appointed, of which he had the honour to be the chairman, for the purpose of inquiring into the condition of the collieries of this country, with respect to their various arrangements for protecting the lives of those who worked in them. That committee sat for a considerable time, and among their recommendations was one for the appointment of inspectors, in order, if possible, to obtain better information by local examination, and to bring home to the parties who had the management of these establishments the responsibility of taking all necessary precautions for securing the lives of those whom they employed. In consequence of such inquiry, the Act was passed empowering Government to appoint inspectors; they had accordingly been appointed, and had continued in the discharge of their duties since that period. The great object of the recommendation of the committee was to give the greatest possible amount of publicity on the subject, not considering it desirable that a system should be established which would shift the responsibility from those to whom it naturally attached; but that by supervision, by giving information, and rendering that information public, better precautions might be generally secured. He inquired if Government would make the return he asked for? The Earl of CARLISLE could see no objection; on the contrary, he thought Lord WHARNCLIFFE had done some good service by calling public attention to the matter. The period assigned to the inspectors to make their first report was one year, which had not yet expired since their appointment. The Government, however, feeling it was desirable to give as much information as possible, had directed all the inspectors to prepare a general report of their proceedings from the date of their appointment to the 24th June. Two of these reports had been received, and two others were expected in the course of a few days, and he saw no objection to lay these reports before the two Houses of Parliament. He was happy to observe that already considerable good had been accomplished by these appointments; their suggestions had been received by mine owners with great good will, and generally had been promptly complied with; and although accidents had occurred, there was every reason to hope good had been done already, and that much greater benefits would result, when further information and experience had been arrived at. The motion was accordingly agreed to; and it is highly gratifying to find this inquiry emanating from a nobleman, himself a coal-mine proprietor, and the Government so ready to respond to the request. The information thus made public must be of an interesting, and we have no doubt it will prove of an important, character. A wide-spread knowledge of the several systems of ventilation and general working, the security against falls of roof, tapping lodgments of water from old mines, and other causes of accidents in various districts, must lead to comparison and improvement, and thus tend to at least a diminution of those fatalities by which the colliers' life is ever surrounded. Much more might be said on such a momentous subject, but we shall reserve further comment until after the presentation of the reports.

It is with much satisfaction we direct the attention of our readers to a communication which appears in another column, written by our esteemed and talented correspondent, Mr. GOLDSWORTHY GURNEY, who has been requested by a deputation of coal miners of Northumberland, Durham, and Lancashire, to render them some information with regard to the safety-lamp, and constructing a differential barometer. Our limits have not allowed us to publish this week more than the first part of the paper on these important subjects, the continuation of which will appear in our next. In the present notice the laws of light are clearly laid down, and many of the seeming obscurities which have hitherto baffled and perplexed the practical operative are lucidly and clearly explained. It is no mean tribute to Mr. GOLDSWORTHY GURNEY'S well-earned fame and high celebrity that he has been selected by the working miners of the most important coal districts in the kingdom to afford the information they are in need of: it clearly shows that they are convinced that to his scientific attainments he adds practical knowledge, two qualifications which are rarely combined.

Poor Patent Reform!—about which so much has appeared in the pages of the MINING JOURNAL, and to effect which has been our constant desire and endeavour—has, after surmounting the opposition of Sir J. GRAHAM and others in the House of Commons, been consigned by the Upper House to the fate of other "blind kittens of the Session," as our facetious contemporary, *Punch*, says. Indeed, the untoward fate of this bill is clearly due to the Government itself, who placed it in peril by introducing at the last moment petty amendments wholesale, and delayed the bill till too late.

As regards this measure, we never placed implicit confidence in it; but still we hoped it might effect the noble object wherein we have laboured for years past; we say *hoped*, because circumstances attending the progress of the proposed PATENT LAW AMENDMENT BILL, and certain points in the bill itself, which left its effect very much at the mercy of the Government officials, forbade our according to it a fuller measure of our confidence as an ample and efficient remedial measure; thus, Lord GRANVILLE, in bringing forward the bill in the House of Lords, stated his disbelief in the soundness of the policy of according any property in an invention, or special remuneration to inventors, wherein he stated he was supported by several of the witnesses examined by the Select Committee of the House of Lords, who, being men of eminence and respectability, we abstain from naming, feeling convinced that they will hereafter desire to renounce any participation in such twaddle—for it can be nothing else to say that inventors will be induced to give their inventions to the world without a *quid pro quo*; or to argue that this great commercial and manufacturing nation, now competing with the whole world, can prove successful without the constant aid of inventions and improvements in the useful arts. Nevertheless, thus said my lord, whose extraordinary opinion found a response in the House of Commons. From whom?—strange to say, from Mr. J. L. RICARDO, M.P., the chairman of the Electric Telegraph Company, who hold some 40 patents, and who lately applied for an extension of certain letters patent; and who, it is said by some uncharitable people, are tired of combatting rival patentees, and buying up patents; therefore they wish no more to be granted—the law, of course, saving harmless the existing rights. Now, all this failed not to influence the details of the proposed bill, and cast a shadow over the bright prospect it otherwise presented to us; and it is openly avowed that the Patent Law was to be reformed with the view to test the patent system in a fair and reasonable manner, it being considered too unjust to test it by the present legal abomination. But, with all drawbacks, the bill would have been a great improvement, especially in this—that for 5*l.* (or about 10*l.*, including the expense of preparing the necessary documents, &c.) the patent right could be obtained *for a short period*, so that capital might be obtained, or the invention worked, without any great outlay. At the end of this period about 20*l.* more must be paid; in three years' time, 50*l.*; and in seven years' time, 100*l.* Examiners were to examine all applications for inventions, subject to the judgement of the law officers, and full opportunity is to be given to the public to object to the grant.

We think it right to state that to Mr. WEBSTER, the barrister, the cause of patent reform is much indebted, inasmuch as he has laboured unceasingly to bring the measure into an effective and practical shape. Our correspondent, Mr. CAMPIN, also deserves honourable mention in regard to this matter; to these, and other gentlemen who have exerted themselves in the cause, we, therefore, tender our meed of praise.

The termination of the parliamentary session will have enabled the Members of both Houses to retire to their pleasant country seats, where, in the great majority of cases, as magistrates, or as landed proprietors, a class of duties devolves upon them second only to those which they have just risen from in New Palace-yard. The encouragement and, in some instances, the superintendence of the great branches of public industry, especially in the agricultural and mining departments, together with a watchful care of the improvement and elevation of the lower orders, by doing all that is possible to procure for them a more general education and a larger circle of material comforts, are among the duties which, during the suspension of legislative labours, the gentry and nobility of England ought, from their position and their opportunities, to be diligently engaged in. In Devon and Cornwall, the two counties with which our occupation as journalists places us in constant communication, we believe these inter-sessional duties are faithfully discharged. We are satisfied that the great public interests of the latter county in particular, as well as the private inter-communication between the county Members and their constituencies, is as friendly, frequent, and cordial as their intimate relation to each other calls for; and we have reason to believe that there is no county, in the west of England at least, in which the electors are better satisfied with their sitting Members, or the Members with the electors, than in the county of which we now speak. We have heard recently, with some surprise, indeed, that in the eastern division of the county there is something like an intention to unseat one of the Members at the first opportunity, but we can scarcely believe that such a pur-

pose is seriously entertained, for the gentleman whose seat the discontented would seek to transfer has consistently and faithfully kept to those principles which procured him the approbation of the eastern division of the county at the last election. To be sure, the constituency of Cornwall is under no absolute obligation to continue sailing in the same direction which they have now some years persevered in; or the stars of their political horizon may have a little changed their place, and they may change the course of their navigation to correspond with it; but will they permit us to tell them that the sea which they seek to enter is not the ocean out of which they came some six years since: that will never again be a navigable region—the whirlpools that disturb it, and the storms which traverse it, render it now a ten-fold more dangerous and utterly impracticable sea. If a protectionist majority should ever again be in Parliament, it would still be *impossible* to re-enact protection: the gentlemen of the eastern division may at once rid their minds of that infatuation. You will never again levy your "black mail" either on the mines or the farms of Cornwall: you *must* run the race of open competition, and if in view of this necessity you still continue to take steps against a Member who has discharged his duties and kept his engagement with you faithfully and diligently, we forwarn you of your certain failure, and of your assured defeat.

Our readers will recollect, during the latter period of the year 1848, and the commencement of 1849, that our columns were occupied a considerable period by various communications from several talented correspondent on COPPER SHEATHING, and the probable causes of its deterioration. Although much valuable information was elicited at that time, we cannot disguise the fact that no practical result was arrived at. Each party, whilst giving information, seemed to require that the opponents in the discussion should, at the time they confuted their argum ents, bring such facts to bear as could finally settle the question. Those who pretended they could do so, and styled themselves practical smelters at the most interesting part of the discussion remained absolutely silent, from what cause we are at a loss to surmise; sufficient it is, the facts were so.

The question has been lately again mooted by Mr. NAPIER; and in a late Journal a gentleman, signing himself "Ærarius," has appeared in the field. From the heavy expense detailed each year in our annual naval estimates, the gentleman who could find a panacea for the deterioration of copper used in ships' bottoms would be considered a benefactor to his country, and, no doubt, from a *Liberal* Government, would receive the compensation which such great service undoubtedly would merit. What we would humbly suggest is, that those of our correspondents who take part in this discussion should not confine themselves to crude theories or visionary experiments, but give to the world the benefit of their experience, deduced from facts and observations. If the suggestions they put forward are of practical use, they will, no doubt, obtain the meed which they require; and at the same time they are obtaining a reward for their labours, it will be tempered by the satisfaction of knowing they have conferred a benefit on the marine—not only of their own country, but all other nations. Our columns are open to those who enter into this important discussion, with a view of benefitting mankind in general; but we must protest against their being made the vehicle of personalities, or of acquiring information at the expense of those who probably have laboured during a whole life to elicit this most elaborate and difficult question, even though it has been fruitless as yet.

From the Board of Trade returns we extract the following detailed account of the quantities of metals of home produce and manufacture exported from the United Kingdom during the month ending the 5th July last, as compared with the corresponding period of two previous years:—

Metals.	1849.	1850.	1851.
Iron—Pig ..... *tons*	23,145	17,332	22,277
Bar, bolt, and rod	42,945	44,636	59,021
Wire	297	289	377
Cast	1,151	1,935	2,931
Wrought of all sorts	10,212	11,333	13,141
Steel—Unwrought	664	973	969
Copper, in bricks and pigs ..... *cwts.*	9,861	7,909	10,372
Sheets, nails, &c. (including mixed or yellow metal for sheathing) ..	20,379	19,450	17,986
Wrought of other sorts	2,647	1,129	1,507
Brass of all sorts	1,826	1,750	1,627
Lead ..... *tons*	1,446	2,613	1,936
Tin—Unwrought ..... *cwts.*	2,519	3,340	832
Tin-plates ..... *value*	£64,669	£67,984	£79,510

These returns, in their general features, present little variation from those periodically noticed by us for some months past—the state of healthful activity observable in this highly important branch of business being still strongly evinced. The total declared value of all the metals comprised in the above table is 839,665*l.* against 767,443*l.* in the same month of 1850, and 760,876*l.* in 1849—showing an increase over the two previous years of about 10*l.* per cent.; and the returns for the six months ending the 5th July in each year exhibit still more favourable results. Iron and tin-plates show the chief increase, whilst copper is steady.

The exports in the month ended July 5, of foreign and colonial produce, are as under:—

	1849.	1850.	1851.
Copper, unwrought and part wrought .. *cwts.*	720	2370	4182
Iron, in bars, unwrought ..... *tons*	427	360	548
Steel, unwrought	—	203	16
Lead, pig and sheet	846	460	500
Spelter	891	1183	210
Tin, in blocks, ingots, bars, or slabs .. *cwts.*	1,853	93	96
Quicksilver ..... *lbs.*	76,432	28,817	59,901

Copper, iron, and lead, are thus shown to be increasing, whilst the export of foreign tin and spelter is falling off.

The returns of imports in the month ended July 5 are—

Metals.	1849.	1850.	1851.
Copper ore and regulus ..... *tons*	3285	4281	2802
Copper, unwrought and part wrought .. *cwts*	5735	6083	18790
Iron, in bars, unwrought ..... *tons*	1914	2147	3053
Steel, unwrought	130	1	54
Lead, pig and sheet	1000	938	1503
Spelter	1112	1901	2723
Tin, in blocks, ingots, bars, or slabs .. *cwts.*	2050	2205	2396
Quicksilver ..... *lbs.*	334,549	7472	12564

The features in this return are again the increase in lead, spelter, and tin, whilst iron is also looking up. Imports of quicksilver still very small.

CONTINENTAL *v.* BRITISH CHEMISTRY.—In a late German treatise upon the progress of science, it is stated that during the last 10 years the most important discoveries in organic chemistry have been made by Mulder, Löwig, Wöhler, Laurent, Cahours, Frankland, Brodie, Muspratt, Stenhouse, and Blyth. We were greatly pleased to find that this country had produced as much, if not more, brilliant researches than even the continent, a fact well worthy of mention, for it proves that our present race of chemists are anxious to keep up for England that scientific eminence which had been gained for it by Cavendish, Hales, Priestly, and Davy.

SINKING SHAFTS AND BORING.—Messrs. C. G. Kind, engineer, and C. A. de Wendel, ironmaster, of Paris, have just specified their "improvements in the process and instruments to be used for boring the earth and sinking shafts of any given diameter for mining and other purposes, and in the means of lining such shafts." The improvements in the process and instruments for boring the earth, comprehend a novel construction of boring tool, a method of withdrawing a clod of earth to ascertain the nature of the soil at any desired depth, a compound boring tool for shafts of large diameter, and a scraper for striking the soil to the centre of the tool. The improvements in the means of lining shafts have relation to those of a cylindrical form, and consist in the employment of oak cylinders or iron; the former are constructed like barrels, and retained in their proper positions, one above the other, by broad rings or hoops of iron, and the latter have internal flanges, by which they are bolted together.

ANNEALING METALLIC ARTICLES.—Mr. R. Johnson, of Manchester, has patented some improvements in annealing articles of iron and other material. Mr. Johnson's inventions has special relation to the pans or ovens employed for annealing wire, and consist in the application of a central flue, through which the products of combustion from the fire are caused to pass downwards, being reverberated in that direction by the closed top of the oven, before escaping through the chimney. The oven employed is of a circular form, having a ring of fire-bars all round its interior; and the coils of wire are disposed in an air-tight annular case, which occupies the centre of the oven, the flue being formed by the circular space in the annular case or box in which the wire is contained.—*Claim*: The use of a flue or flues situate in the interior of annealing pans or ovens.

IMPORTANT TRIAL OF FIRE-ARMS.

At Mulgrave-house, on Tuesday last, there was another of Lord Ranelagh's select meetings, to test the merits of improvements in sporting and military weapons. It is without doubt a matter of great importance to provide such opportunities for examining inventions which might otherwise linger in obscurity; it is a step in the right direction. We trust, therefore, that no narrow exclusiveness on the part of this aristocratic tribunal will prevent an extension of the principle to more public exhibitions, and a direct encouragement of this branch of the mechanical arts. From the very ingenious subjects of investigation on the present occasion, we feel assured that it only requires time and perseverance to develope largely the resources of English skill in the fabrication of firearms; and notwithstanding the supposed decision of the jurors in favour of the French articles of this class in the Exhibition, it is our conviction that in the substantial excellence of an effective arm, the work of our artizans will surpass all others. The first weapons tried on Wednesday were Colt's revolver (a United States dragoon's regulation pistol) and an English modification of the revolver, by Messrs. Deane, Adams, and Deane, of King William-street. The latter was of much greater calibre than its American competitor, and, therefore, gave somewhat a heavier recoil; but in other respects it was infinitely superior, though susceptible of improvement. It was lighter, more effective in every way as a cavalry weapon, and had the advantage of a self-acting apparatus. The firing of both at 100 yds. was very good, though not very exact; and it would seem that Deane's pistol could deliver its six charges in the time of four discharges by Colt's. However, it would not be fair to assume this as a fact, in the absence of a representative on the part of the American patentee. Then the same makers exhibited a new pistol and rifle, requiring an exceedingly small charge of powder, with a peculiar ball. On the breech plug is raised a conical projection, with a chamber, in which the powder is placed by a charger in the ramrod, inverting the weapon. The ball, which is a hollow cone, is then driven home—the same chamber in the ramrod serving to keep the ball in its right direction. The powder exploding in the cavity of the ball expands it, so as to fill the whole calibre, and thereby obviate the inconvenience of windage. The rapidity and force of the firing was very great indeed. Mr. Deane also produced his back-action percussion lock, of which, the more it is examined the more is to be admired the strict simplicity in having only three pieces—the plate, the cock, and mainspring—thus getting rid of the complication of the old form of cear, roller, &c. He explained the advantages of raised ribs instead of grooves, exemplified in a rifle similar to that in his lot in the Crystal Palace, the principal point of which is the diminution of friction.

Mr. Sears, the patentee of the needle-gun, with improvements on the Prussian plan, again showed excellent practice at 150 yards with rifle, musket, and carbine. The principle, although seemingly complicated, is far from being so in reality. The apparatus is so little known that we may be excused for giving a more minute description than our former notice. The barrel of the gun is prolonged at the breech end, so as to form a chamber, to permit a cylinder, containing the needle apparatus, being bolted close up to the breech, to form the base of resistance for the explosion. The cylinder has the form of a door-bolt, and contains the mechanism, sliding back to admit the charge at the breech. The exact details we may give from Mr. Sears's book in a future Number. The charge consists of a ball—the upper part of which is an exact cone (not of the sugar-loaf form as usual), with a cylindrical base, having circular grooves, round which is wound a cotton thread, securing the paper cartridge, greased. Next to the ball comes a disc of pasteboard, with a central aperture, in which is placed the fulminating mercury between two discs of very fine sheet copper; and, lastly, we have the powder—two drachms—less than half the usual complement. It is alleged that the needle striking the disc in front of the powder effects the perfect combustion of the powder in the explosion, and thus economises the powder and diminishes the recoil. The mechanism which propels the needle is a helical or spiral spring, in the coil of which a bar, with the needle attached, plays. This is cocked by contracting the spring, and is let off somewhat on the principle of a child's gun.

Messrs. Needham, of Piccadilly, produced a modification of this aparatus connected with the common musket-barrel, and also a carbine with a mechanism for self-loading 10 rounds. The form was undeniably more compact than that of Sears's, but we had not an opportunity of observing whether the invention was more effective; as Mr. Needham was not prepared with ammunition. Further consideration of it is deferred till the next meeting, when we shall give a description of its peculiarties.

We are bound to notice two handsome, but unfinished, double-barrelled pieces, by Squires, of Mile End-road, designed for ball practice on the Nile—a party of Lord Ranelagh's friends being about to relinquish the tame sports of our fields for the monster game of Africa, as everything on the *monstrous* scale is now fashionable.

There was a very general expression of regret for the absence of Mr. Callow's blasting experiments, on account of his continued indisposition; but we are glad to add that we are informed that Mr. Callow will attend the next meeting.

[Want of space obliges us to defer the continuation of observations by "A Pyrotechnist" on Callow's powder, as well as the report furnished us by the patentee.]

COLLEGE OF CHEMISTRY, LIVERPOOL.

REPORT OF THE SIXTH SESSION.

"We regard the establishment of Colleges of Chemistry as a very happy result of the growing intelligence of the age. The science to which these are devoted is one that is bounded only by the globe itself, and the laws which it unfolds are admirably calculated to enlarge the mind and strengthen the intellect."

"Chemistry, as an independent science, offers one of the most powerful means towards the attainment of a higher mental cultivation. That the study of chemistry is profitable, not only inasmuch as it promotes the material interests of mankind, but it also furnishes us with an insight into those wonders of creation which immediately surround us, and with which our existence, life, and development, are most closely connected. It is so congenial to the ever-active human intellect to inquire into the causes of natural phenomena, and into the changes which we daily observe in all that surrounds us, that those sciences which give satisfactory answers to our inquiries exercise more influence on the progress of mental cultivation than any others. As the human mind advances in knowledge, from whatever source that knowledge may be derived, all its powers are strengthened, and its progress, in all other directions, thus promoted. The exact knowledge of the relation connecting certain phenomena, the acquisition of a new truth, is equivalent to a new sense, enabling us now to perceive and recognise innumerable phenomena, which remain invisible and concealed to others, as they formerly were to ourselves."

We now direct attention to what has been done during the sixth session just terminated; and, in doing so, we are glad to state that it has, as on every former occasion, been highly successful. Numerous interesting researches have been performed and facts elucidated, some of which, from their interest and novelty in our town, we will enumerate. From the extent of the range of chemistry, every session gives birth to additions and discoveries of great importance. Previous to the establishment of a College of Chemistry, Liverpool had but very little to boast of, if she at all was known in the list of those favoured nurseries of scientific discoveries; but now she begins to assume an air of self-estimation, and sends, to grace the tomes of our national and other foreign societies, decisive discoveries and important researches on the most difficult and intricate subjects.

Dr. Muspratt, in conjunction with his assistant, Mr. Joseph Danson, furnished the investigation upon cloves, and a new acid (carmufellic acid) derived therefrom. The result of their labours was read before the Royal Society of Edinburgh. The professor also furnished the Chemical Society of London with some interesting results upon arsenious acid, and its combinations with albumen, &c., which established more firmly Liebig's views on the insoluble combinations of metallic oxides with organic compounds. Mr. Adam J. Fairrie has worked upon the chromates of alumina and manganese. Chromate of the protoxide of manganese had, for many years, been supposed to exist; but Mr. Fairrie's numerical results and conclusions prove the contrary. His paper on this subject has been forwarded to the Chemical Society of London, together with a series of elaborate and very interesting analysis of milk, by Mr. John Ellis Roberts. The latter gentleman has completed several analysis of mineral and spring waters to the satisfaction of the professor. Mr. Ralph W. Forster, of Whitehaven, has performed a complete analysis of the refuse of pyrites, technically termed "pyrites-waste," in order to ascertain the amount of sulphur unavailable to the sulphuric acid manufacturer. Mr. B. F. Wilson, of Rhuabon, has been busily engaged with the analysis of the principal mining productions of North and South Wales; the results he intends to incorporate in a work he is getting up on the geology of South Wales, for the information of miners, &c.

Mr. Alexander Crawford, jun., of Belfast, in order to perfect himself in organic and inorganic analysis, has gone through several intricate determinations in both these departments. At present he is engaged with the investigation of the arsenites. The completion of this research will no doubt occupy several months, but when finished it will be a fine addition to science. Mr. W. Gaskell, of Manchester, has been diligently engaged in qualitative determination; and Mr. W. E. Richardson, of Dudley, has been perfecting himself in numerous analysis for the profession of an engineer. Mr. J. R. Tanner, of Glamorgan, has been ascertaining the constituents of slags from iron furnaces, with the view of getting an insight into the best mode of working those hitherto useless products in the iron manufacture. Mr. John D. Irven and others have made several excellent quantitative analysis, which have merited high encomiums from the preceptor.

We have given a cursory sketch of the work of the session. Our readers will see that an immense deal has been accomplished; more, we believe, than in most other laboratories. To show how much we are indebted to Dr. Muspratt, and his endeavours to enrol Liverpool among the European seats of philosophical discoveries, it is only necessary to refer to the report which we have from time to time given of the growing progress of his institution at the end of each session, when the valuable and interesting facts emanating from his college, though but imperfectly sketched by us, will speak volumes in its favour. We cannot refrain from stating that, in perusing lately a translation of a German treatise, the investigations of Dr. Muspratt and his pupils occupied a very great share of the work. It is impossible to over-estimate the benefits of this noble school, which was founded by one man, and which has obtained a position second to none, solely through the energy and courage of the founder, its professor, in spite of all opposition and malicious railing. The greatest triumph it has achieved during the last six months, is its recognition by the Apothecaries' Hall of London. They rescinded a bye-law of 10 years' standing in its favour. We were among the first to shew the injustice of their refusing to acknowledge it. The subject was taken up by the leading men and press of London, until at last their very organ, the *Lancet*, remarked,—"Of Dr. Muspratt's merits as a scientific chemist we need not write one word; his reputation is not confined to our own schools or our own country. By dint of great exertions, he has founded at Liverpool a College of Chemistry, in which the duties of lecturing and the laboratory are conducted with extraordinary zeal and success." It is well worth stating that scientific men from all parts of France and Germany, who now visit the metropolis, generally make their way here to inspect our laboratories, "the freemasonry of science not being trammelled by the formalities of ordinary social intercourse." We have heard that France, to show her respect for the position and learning of Dr. Muspratt, intends electing him a member of her first scientific body.—*Liverpool Journal.*

INCLINED PLANES ON CANALS.

We are indebted to a correspondent for the following description of an inclined plane for conveying boats from one level to another on the Monkland Canal, at Blackhill, near Glasgow, constructed in 1850, by James Leslie, Esq., F.R.S.S.A., C.E., Edinburgh.

The first application of the inclined plane to the purpose of conveying vessels from one reach of a canal to another at a greater elevation was, we believe, that of Mr. William Reynolds on the Ketly Canal, in Shropshire, about the year 1789. Afterwards it was adopted on the Shropshire Canal, the Duke of Bridgewater's Canal (since, however, discontinued on the latter), and more recently it has been, on a much larger scale, successfully employed on the Morris Canal, United States.

A description of the Morris Canal inclines, of which there are a number, is given in Mr. David Stevenson's book on the *Engineering Works of North America*; but various improvements have since been effected, more particularly on one of the inclines, where, in order to dispense with a lock at the upper reach, the carriage containing the vessel is pulled over the summit, and so launched into the canal.

On the Great Western Canal boats are raised and lowered by means of a perpendicular lift, as described by the late Mr. Green to the Institution of Civil Engineers.

In a report dated January, 1839, the late Mr. Andrew Thomson, C.E., of Glasgow, recommended the inclined plane for adoption on the Monkland Canal, for the purpose of taking up empty boats. This originated from the circumstance of the two uppermost locks at Blackhill being in such a bad state of repair, that it became necessary either to rebuild them or to construct new ones. This latter method was, by the advice of Mr. Leslie, adopted, and in 1838 two new double locks were constructed by the sides of the old ones. It soon became evident, however, from the great increase in the traffic, that either an entire second set of locks must be constructed, or some other means devised for passing a greater number of boats. It was then remitted to Mr. Leslie by the committee of management to report on Mr. Thomson's plan, and the result was that in an able report, dated October, 1839, that gentleman recommended that the inclined plane be adopted, with modifications. Mr. Leslie's two proposals were—first, to bring the vessels up the incline on a cradle dry, and then launch them over the summit into the upper reach, as in the case of the Morris Canal; or, secondly, to bring up the vessel afloat in a water-tight caisson, and by effecting a junction at the upper reach raise a gate or sluice, and allow the vessel to float out, as suggested by Mr. Thomson.

In 1840 Sir John Macneil was called on to report on the inclined plane, and did so favourably, suggesting, at the same time, a somewhat different arrangement of the carriages and counterbalance than that of Mr. Leslie. By this time the Monkland Canal Company had obtained the favourable opinion of three eminent scientific gentlemen towards the adoption of the inclined plane. This seems, however, to have had little influence in determining their mode of procedure, since we find them ultimately agreeing not to adopt any of these plans, and in 1841 proceeding to rebuild the old locks at the upper elevation, and build new ones at the lower. After this the trade seems to have been well accommodated, and we hear nothing more of the Monkland Canal Company until the year 1849, when, notwithstanding a provisional storage of water, exceeding 300,000,000 cubic feet, the supply became short, and the canal, in consequence, had to be shut for six weeks. It then became obvious that the enormous waste of water in the locks could ill be afforded, and that some effectual means must be adopted for preventing such an interruption in future. Meantime, the canal had become the property of the Forth and Clyde Canal Company, and Mr. Leslie, along with their own engineer (Mr. Bateman), was *once more* called on to examine and report.

After considering a plan of providing an additional supply of water, by enlarging the reservoirs, or forming new ones, and another of pumping water from the lower to the upper reach by immense Cornish engines, both of which were found impracticable, these gentlemen finally directed their attention to the old scheme of the inclined plane, the designs for which had laid aside for 10 years. This was recommended to the committee of management, who approved of the report, and at length Mr. Leslie was instructed to prepare the working plans and specifications. By the end of July, 1850, the whole work was completed, according to those plans, at a cost of 12,000*l.*, and the practical details of this important engineering work we give as follows:—

The height to be overcome at Blackhill is 96 feet. The incline is 1040 feet long, having a gradient of 1 in 10. There are two lines of rails having a gauge of 7 feet, and there is a carriage on each having on it a water-tight caisson, in which the boats are taken up afloat, or partly water-borne. While one caisson is ascending with a boat in it, the other is descending on the opposite line of rails with a load of water in it, so that the one nearly counter-balances the other. The motion is given by two high-pressure 25-horse power engines, which drive two vertical drums of 16 feet diameter, fixed on separate shafts, so as to move in opposite directions, and having a 2-inch wire rope coiled on them. The drums move at the rate of about one turn to every 12 strokes of the engines, or about two miles an hour. When one caisson is run down into the water of the lower reach the lower sluice is opened, and a boat floated in, and the sluice again shut. This caisson is taken up to the top, and pressed hard to the gates of the upper reach by means of a hydraulic apparatus, moved by a heavy weight, which had previously been lifted by the engine during the ascent of the carriage. By this means a water-tight joint is formed between the lips of the caisson and the gate of the upper reach, so that both the canal gate and the upper gate of the caisson, which are all on the lifting or portcullis principle, may be opened and the boat floated into the upper reach. The small quantity of water contained between the two gates—viz.: about 50 cubic feet—is caught in a trough, and conveyed to the uppermost basin of the locks. The caissons are formed of boiler plates, and are 70 feet long, being the extreme length of the boats, 13 feet 4 inches wide, and 2 feet 9 inches deep. The cross section is taken as nearly as possible from the mould of the boat, with a hollow space for the keel, so as to require as little water as possible. The after-end of the carriage is set much higher above the rails than the fore-end, so as to keep the caisson level. The time occupied in the passage of a boat from the lower to the upper reach does not exceed 10 minutes—two minutes for the boat entering the caisson, five or six minutes for the ascent, and two minutes for the boat leaving the caisson; but, as one boat is entering the caisson while another is entering the upper reach of the canal, there is one boat passed every eight minutes—indeed, 16 have been passed in two hours. During the month of April 43 boats on an average have been passed in a day. The greatest number has been 48 up, and two down, during 9 or 10 working hours, but a number more could have been passed had they come forward. Shortly after the machinery was completed, in the autumn of last year, the spur-wheel on the second drum-shaft broke, and for the rest of the season only one caisson was worked, consequently only one-half of the work was done that might have been done, and that at a great expenditure of power from the want of counter-balance, so that the engines had a great deal more work to do than usual; but, even in this way, about 30 boats were generally taken up in a day. The spur-wheels have been strengthened and other improvements made, chiefly in the introduction of the hydraulic press at the top. For the sake of safety, there is a line of ratchets alongside of each rail, and the ascending carriage has four palls constantly working into the teeth of the ratchets, so as to prevent the carriage from running down. The descending carriage cannot have the palls constantly working, but should anything go wrong with the rope, a large draught-spring under the carriage, to which it is attached, by its opening out when the tension is removed, would allow the palls to fall down. The inclined plane is quite a favourite with the boatmen, as it saves a great deal of time in ascending—viz.: from 20 to 30 minutes, the time taken in passing the locks being generally from 30 to 40 minutes, instead of 10 by the inclined plane. It also saves a great deal of labour of men and horses, and fear and wear of boats and machinery. There are generally about 60 or 70 boats passing each way daily on the canal, whereof about three-fourths are empty. The weight of the carriage, empty boat, and water, is from 70 to 80 tons, but by taking up rather less water than what is required to float the boat entirely, a considerable saving of weight is effected, which, however, is only of consequence so far as it affects the strain on the rope and machinery, as it makes little difference to the working of engines, so long as the two carriages are equally balanced. It was at one time proposed to pump up water to supply the locks, but this was given up, as the loss of power would have been enormous, there being 350 tons required to be pumped up 96 feet, for the sake of taking up one empty boat weighing about 22 tons, besides that no saving of time would have been effected. There is now no detention, whereas formerly there were frequently 15 or 20 boats waiting their turns. After the dry season comes on, the whole of the empty boats going either up or down will be passed by the incline. On the whole, the inclined plane is now working most successfully and satisfactorily, and is answering every expectation that was formed of it.

SILVER MINE IN CALIFORNIA.—From San Fransisco we have the following report of a new silver mine, near Los Angelos:—"Two of a company of miners arrived in this city, to-day, from the mountains in this vicinity. The object of their visit is to procure men to work a silver mine recently discovered at a point in the mountains about 80 miles in a north-west direction from Los Angelos. This mine was discovered by a German several months since, and in richness and extent is said to be superior to any silver mine yet discovered on this continent. Its ore has been carefully assayed by competent men, one of whom has been already engaged by the company at a salary of $12,000 per annum. The fortunate discoverer has sold 2,[illegible] shares, at $5000 each."

TO THE DEPUTATION OF THE COAL MINERS OF NORTHUMBERLAND, DURHAM, AND LANCASHIRE.—No. I.

BY GOLDSWORTHY GURNEY, ESQ.

GENTLEMEN,—You have done me the honour to wait on me to request that I would give you some information for improving the safety-lamp, and for constructing a differential barometer, which you are pleased to say you believe I can do. I promised to write you on the subject; I shall be happy to give you all the information in my power, and it will be a great source of satisfaction to me if it is found at all valuable.

THE SAFETY-LAMP.

In regard to the security of the safety-lamp against explosions of fire-damp, I wish you, in the first place, distinctly to understand that the opinion which I gave in evidence to the Committee of the House of Commons in 1835 on this question (published in their report) is unchanged, and that the truth of that opinion seems to be confirmed by fact and experiment. I shall, therefore, studiously avoid saying anything in the following observations at all likely to interfere with the principles of safety in the lamp. One of your objections to the use of the safety-lamp is that it gives too feeble a light for working purposes, "in consequence of which pitmen will sometimes take off the top of their lamps." The quantity of light lost in the lamp by the wire-gauze is very considerable; and the change made to prevent this loss, by substituting glass to surround the flame, instead of the wire-guaze, as in the Clanny lamp, involves danger from breakage. The various unavoidable accidents which happen in the working of a coal mine, make the use of glass very objectionable. The quantity of light lost in the safety-lamp may be judged of by suspending a lighted lamp in a dark room, equidistant from the walls, ceiling, and floor, and comparing its light with a naked flame. It will be seen that the shadow thrown on the ceiling, walls, and floor of the room are different in intensity, and collectively very considerable. The amount of shadow may be considered as a tolerable measure of the quantity of light lost. The quantity lost horizontally—that which passes out sideways to the walls—is not so great as that upwards and downwards. Its amount may be estimated by taking away the wire-gauze of the lamp on one side, and noting the difference of the illumination on that side, as compared with the other.

From a series of experiments which, some years since, I carefully made with accurate photometers, it was shown that the aggregate amount of loss of light by the safety-lamp was upwards of three-fourths of the whole, compared to that quantity of light which the same flame gave out without being surrounded by wire-gauze. The proportion lost horizontally is no measure of the whole or absolute quantity, and the loss is far greater upwards and downwards, as above stated, than horizontally, because the rays strike the gauze obliquely, and cannot so readily pass the meshes of the lamp. The obliquity of the wires in the gauze prevents the rays from passing through; these rays thus intercepted, falling on a dark unreflecting surface, are lost, and practically so for ever. I have said these falling on an "unreflecting surface."

Before we proceed further, I must call to your recollection a few of the known laws of light. Rays of light lose their power of illumination as the square of the distance through which they pass, because the contents of the space illuminated will be in this proportion. This law, however, is true only as regards radiated light—that is, light emanating or radiated in all directions from a common centre. The rays of light from a naked candle is a familiar instance; but this law is not true as regards reflected light, or need not be. The angle of reflection of light, as you know, is always equal to the angle of incidence; and when these angles, on polished surfaces, are so made that all the rays of radiated light—viz.: the first or incidental rays—shall be reflected parallel to each other, the loss by reflection is very little. It is scarcely appreciable even at considerable distances. Opaque matter floating in the atmosphere partially interrupts the passage of these rays, otherwise there would be little or no loss.

The Bude light, when placed in a true parabola (a reflector made to concentrate all the radiated rays), and converted into a bundle of parallel ones, was seen 94 miles on a clear night, in an experiment on the Pyrennees from a mountain where the curvature of the earth permitted; and the oxy-hydrogen lime light, in an experiment made some years since by the Trinity House, placed in a parabola at Purfleet, threw a visibly distinct shadow on a white screen at Blackwall; the distance is 11 miles. I mention these facts, because I mean to show you that it is possible, by taking advantage of some of the laws there in operation, to improve the illuminating power of the safety-lamp. Light which falls on polished bright surfaces, it is found, is reflected back again without much loss—that from a good mirror, for instance; but rays which fall on dark surfaces are absorbed or destroyed.

It is manifest in your lamp that all the rays of light which fall on the surface of the dark unreflecting wire of which your lamp is made are intercepted, and lost for ever. Now, taking into consideration the known laws of reflection, it is equally manifest that if the gauze presented a reflecting instead of an absorbing surface, the rays intercepted by the wires would be reflected back, and turned to account. The first suggestion, therefore, that occurs for the improvement of your lamp, with a view of getting more light, is to substitute a burnished or polished wire, of which to make the gauze, instead of the black iron wire, of which it is now made. Every wire would then have a reflecting surface; every ray of light falling on and intercepted by it would be reflected back, and find its way through the meshes or openings of the net work—perhaps not at the first reflection, but on the second or third; for if the reflected ray, in the first reflection, chanced to fall on a wire on the opposite side instead of an aperture, it would be reflected back the second time, and most likely find its way out on the other side. From a series of experiments carefully made with a lamp so constructed, the loss of light does not appear to amount to one-eighth of the whole. Silver-plated wire, drawn through a burnisher, is highly reflective, and the increase of its expense over the common wire is so little, that the extra quantity of light gained by it will more than cover the difference of cost in a short time. An objection might arise to this, that the polished surface will tarnish, become smoked, or in some way or other the reflecting power will be destroyed. A simple mode of cleaning will remove this objection; a hair brush, called the fox tail, like the lamp glass-cleaner generally used, would, in a few seconds, render the face of the gauze clean and bright. Your common lamp must be cleaned. If you allow the reflecting lamp to tarnish, and become an absorbing one, it will be no worse than your present lamp in its best state. The smoking of the gauze by the flame of the lamp, if not kept upright, is a point we will presently consider.

Let us now consider the loss of light at the lower part of the lamp, downwards. This is occasioned by the light falling on, and being intercepted by, the oil can. This vessel, in your lamp, has a dark absorbing surface, and as the flame is placed low down in the lamp it cuts off a considerable quantity of light, otherwise available. To avoid this loss we must also take advantage of the laws of reflection. It is evident, if the oil vessel was also made with a reflecting surface, the rays of light which fall on it might be turned to account; its surface might easily be made to reflect the rays at such angles as would be most useful.

It may be proper here to remark that the pitmen require for their work light to be thrown downwards, and I believe with this view they sometimes place their lamp on one side. To avoid this, let a reflector be placed above the lamp, like that used in shop windows; sufficient might then be reflected downwards, so as not to require the lamp to be put on its side. The reflector may be of metal, with a few holes in it; it would then pass a portion of light upwards also.

We will now proceed to consider whether the quantity of light given out from the flame itself might not be increased. In all burning of oil the absolute quantity of light given out from its flame will always be in a direct proportion to the perfect state of its combustion. An open flame without a glass chimney does not give out so much light from the same flame as one with. An Argand lamp is an instance. The reason is that the glass chimney produces a current of air which strikes the flame of the burning wick, and renders the combustion of the oil more perfect. The glass chimney acts, in producing a current of air upwards, like the upcast shaft for ventilation in your mines. You are aware that the upcast shaft occasions a stream, or current of air, at and around to a considerable distance from its base. We may take advantage of this fact to obtain extra light in your lamp. If the flame be surrounded by a glass chimney, it would, possibly, break, and be subject to other objections; but if a small metallic chimney, smaller at its base, be placed a little above the level of the flame, the current produced by it will draw the air in sideways, and strike at the point of greatest intensity of combustion, and effect as perfect combustion as if a glass chimney surrounded it. This metallic chimney should be made of very thin iron-plate, 4 inches long, and about ¾ inch diameter. It may be secured in its situation, rather above than below the level of the apex, by iron stays. All smoke would be consumed, even if the lamp fell on one side.

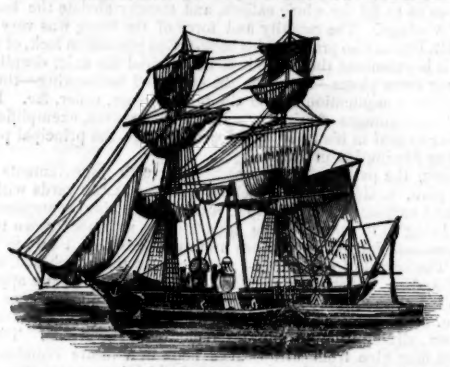
This chimney has no practical objection. It would not break nor be injured by the flame, even if the lamp be turned on one side; and in such case it would pass the flame through its centre, and prevent any smoking or injury of the polished wire-gauze. The obstruction of light by it upwards will not be so much as might at first appear. The side of this cylinder will be in a line with the direct rays of light.

In confirmation of the action of these upcasts, I may state that I placed metallic chimneys on the burners in lighting the House of Commons ten years ago. They have been used ever since, and are still used there with practical success. They are placed above the apex of the flame, to pull in a strong current across the point of greatest intensity of the flame, in the modification of the Bude light, with which the House is lighted. It may be observed in passing the globes of ground glass, which surround the burners in the House of Commons, to soften the light, have a network of wire weaved around them, of large mesh, to prevent any separation of the glass in case of breakage. The meshes are so large that they do not obstruct the light, and the wires so small that they are not visible. This network might be similarly used about the glass of the safety-lamp, as modified by Dr. Clanny and others, if you use it to prevent the glass falling out in case of breakage.

To conclude this part of the subject, there is no doubt if you make the wire-gauze of the safety-lamp a reflecting, instead of an absorbing surface, the oil vessel the same, and use a metallic chimney properly fixed, that you may greatly increase the light now obtained; you may burn a larger wick and better oil at less expense; and, with the above arrangement, you may obtain three times the quantity of light from the safety-lamp that you do at present, without in any way affecting its principle of safety.

[*To be concluded in next week's Mining Journal.*]

COAL WHIPPING IN THE PORT OF LONDON.



The rail has come in competition with the colliery shipping interest—that nursery for seamen for the Royal Navy, which we devoutly hope is no longer necessary to keep afloat the wooden walls of Old England, or preserve our hearths and homes from desecration and abuse. The "Pool," like a startled hare, is pricking up its ears at this innovation, and is, almost at the eleventh hour, commencing the adoption of steam-power for whipping coals from the holds of the brigs into the barges. Messrs. E. and A. Prior, of Upper Thames-street, have patented a plan for the adoption of a portable steam-engine, which is admirably adapted to the purpose, and which is getting extensively into use. On Monday last we were on board the collier brig *Crocus*, 365 tons burthen, and witnessed the operation of this application of portable steam-power to the unloading of ships, with much satisfaction. This engine, designed by, and constructed under the direction of, Mr. F. H. Trevithick, takes up but little room on the deck of a vessel; the action is direct, the piston rod working the crank axle, on which is the drum that winds the chain, drawing up the box from below.

The above diagram will give a good idea of the mode of operation. The engine, when not at work, is kept in a barge built for the purpose, as represented at the right hand, with its mast, tackle, chains, &c., by which it can be slung on board with the greatest facility, and taken away when the hold of the vessel has been emptied of its contents. The boxes used hold 5 cwts., and by this plan more than 20 tons per hour can be delivered into the barges. A 70 ton barge has been filled in three hours, and on one occasion 209 tons were delivered from a vessel in nine hours and a half, with one gang, consisting of four men; but the operation is yet young, and from the observations made on our visit, we have no doubt a quantity of 30 tons per hour may be accomplished. All parties connected with the coal trade are well aware how important is not only the mere cost of whipping coals, but the saving of time, and the prevention of that detention to which the shipping in the trade has hitherto been subject. A gang of men, by the aid of ropes and blocks, could barge about 50 tons a day, which shows that the company formed under Messrs. Prior's patent can at least unload four ships in the same time that under the old plan it would take to unload one, and at considerably less cost. This is an economy well worthy consideration, and not only may it be availed of by coal merchants, but by stone and timber shippers, and all persons requiring the landing of bulky merchandise from vessels in the river. The adoption of this plan for the rapidly unloading colliers and other vessels is also of importance in another and a public view, as tending to prevent that crowding of the Pool which has of late years been so generally and so justly complained of. The adoption generally of this portable engine for the purpose appears to us highly desirable. It weighs little more than 2 tons, can be moved from one vessel to another with the greatest facility by the means the patentees adopt, and we have no doubt it will be brought into very general use for both shipping and unshipping heavy merchandise.

REED'S IMPROVED RAILWAY CHAIRS.—We have, from time to time, noticed in our Journal the construction of a permanent railway, by the adoption of iron in lieu of the more perishable materials of stone and timber. When our attention was first directed to this subject, there existed some doubt whether this new feature in railway engineering could be profitably carried out, and a prejudice appeared to be entertained against making a railway entirely of iron. Subsequent experience has, however, done away with that feeling, and justified Mr. Reed in the view he then took, not only of the practicability but the primary and ultimate economy of such a construction. We now find that engineers approve of the principle, and that a considerable extent of railway has been laid with this more durable material, which we are led to believe, from the reduced price of iron, can be done at less cost than with stone blocks or wooden sleepers, over which iron must have a ten-fold advantage, where durability is taken into account. Wherever economy can be shown in facilitating this great national system of communication, we are glad to see old prejudices wearing out respecting the *modus operandi*; and as Mr. Reed (an advertisement of whose iron chairs appears in another column) was the first in the field in calling attention to this new method of railway construction, which was patented by him several years ago, we cannot but hope that he will reap the benefit, as he undoubtedly is entitled to the credit, of what we consider a very important improvement in the making of railways.

GALLARD'S BICENTIGRADE THERMOMETER.—The object of this design is to retain as nearly as possible the same intervals as on Fahrenheit's scale, to which the English nation has been so long accustomed, and at the same time to adopt a scale which is convertible by the easiest process to the centigrade, dropping altogether the anomaly of a zero point taken from a mixture of snow and salt, which, in the present state of science is both unmeaning and indefinite, and fixing it at the freezing of pure water or ice, the pressure on the barometer being 30 in. The division of the scale in place of 180° is proposed to be 200 from freezing to boiling of water, so that the latter being called 200 will be but a slight departure from Fahrenheit's 212, while the zero of Fahrenheit will be 35·5 of the new scale. It is to be hoped that the adoption of this plan will much obviate the inconveniences that attend the diversity in the scales of the English and continental thermometer that have long been complained of, and still are continually experienced.

HOLLOWAY'S PILLS WONDERFULLY EFFICACIOUS IN THE CURE OF A DISORDERED LIVER.—Mr. R. W. Kirkus, chemist, of Prescot-street, Liverpool, lately informed Professor Holloway that a customer of his (a lady, to whom he is at liberty to refer) has been cured by these invaluable pills of a liver complaint, with which she had been troubled for several years, and so virtulent was the last attack that even her life was despaired of. In this alarming state she tried Holloway's pills, the first dose of which relieved her; and, by continuing their use for a short period, she has been restored to the enjoyment of perfect health.—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand, London.

GOVERNMENT SCHOOL OF MINES, AND OF SCIENCE APPLIED TO THE ARTS.

Museum of Practical Geology. 47

The COURSE of STUDY at this INSTITUTION will commence on THURSDAY, the 6th of November, 1851, and the following LECTURES and PRACTICAL DEMONSTRATIONS will be given during the session:—

1. CHEMISTRY, applied to Arts and Agriculture ... LYON PLAYFAIR, Ph. D., F.R.S.
2. NATURAL HISTORY, applied to Geology and the Arts ... EDWARD FORBES, F.R.S.
3. MECHANICAL SCIENCE, with its applications to Mining ... ROBT. HUNT, Keeper of Mining Records.
4. METALLURGY, with its special applications ... JOHN PERCY, M.D., F.R.S.
5. GEOLOGY, and its practical applications ... A. C. RAMSAY, F.R.S.
6. MINING and MINERALOGY ... WARINGTON W. SMYTH, M.A.

The fee for the course of two years is one payment of £30; or £20 for each session, from November to August inclusive.

Practical Instruction in the Field, in Geology, Mining, and Palæontology, is included in the above charges.

Occasional Students may attend separate Courses of Lectures and Field Instruction on payment of the Fees mentioned in the program.

The Laboratories for Chemistry and Metallurgy will be open for the reception of Pupils on payment of £15 for the session of five months.

Officers of the Army and Navy, either in the Queen's or the Honourable East India Company's service, are admitted to the Lectures at half the usual charges.

Students who propose to enter with the view of obtaining the Diploma of the Institution, are requested to apply to Mr. Trenham Reeks, at the Museum, from whom the necessary information may be obtained. H. T. DE LA BECHE, Director.

LIVERPOOL COLLEGE OF CHEMISTRY,—Recognised by all the London Medical Examining Boards, and the Apothecaries' Hall of Ireland. *Professor*—Dr. SHERIDAN MUSPRATT, F.R.S.E., &c.

ANALYSIS and ASSAYS, sent to the above address, will receive IMMEDIATE ATTENTION.—Fees for Analysis, and for Students working in the Laboratory, may be had on application at the College.

Apothecaries' Hall, London, May 1, 1851. 48

At a Court of Examiners, held this day, it was resolved,—That the Royal College of Chemistry, London, and the College of Chemistry, Liverpool, be for the future recognised as Schools of Practical Chemistry, subject to the Regulations of this Court.

(Signed) HENRY BLATCH, Secretary.

ED. J. DENT has REMOVED from 82 to 61, STRAND (being 21 doors nearer to Charing cross, and directly opposite Bedford-street), and solicits an INSPECTION of his extensive STOCK of CHRONOMETERS, WATCHES, and CLOCKS, as above; also at No. 33, COCKSPUR-STREET, and No. 34, ROYAL EXCHANGE (Clock Tower area). 49

IMPORTANT SAVING IN MINING OPERATIONS.

GUTTA PERCHA HOGAR PIPES, AND SPEAKING TUBES IN MINES.

The GUTTA PERCHA COMPANY have been favoured with the following important Letter from EBENEZER ROGERS, Esq., C.E., F.G.S., Abercarn Fach, near Newport, Monmouthshire:—

March 21.—In reply to your inquiry as to the use of gutta percha as a material for the Hogar pipe used for taking up water in sinking shafts for mines, I have pleasure in stating that my application of it for this purpose is perfectly successful.

The ordinary slide pipe is entirely superseded by the gutta percha Hogar pipe, and it will be evident to every person experienced in mining, that the flexibility and lightness of the latter admits of sumping in any part of the pit, without the great amount of labour attendant on that operation with iron pipes. 50

The freedom from liability to accidents in blasting, and the great facility with which repairs can be effected in case of damage, cannot fail to recommend your material to the notice of every person engaged in mining operations.

The gutta percha Hogar pipe, which we have now in work at the Abercarn Collieries, is about 20 feet in length, and after very severe trials in sinking through hard rocks, where the expensive slide and stock would be always liable to breakage, the gutta percha is little worse for wear. I am also glad to state that the 400 feet of speaking tube for communicating between the top and bottom of the shaft answers admirably, and is a great economist of time. EBENEZER ROGERS.

GUTTA PERCHA PUMP BUCKETS.

COPY OF LETTER FROM MR. C. THOMAS, DOLCOATH MINE, CAMBORNE.

Camborne, Jan. 27.—Three gutta percha 12-inch pit boxes, or pump buckets, drawing water 7½-feet stroke, have been used and worn out in this mine, and I beg to inform you that they have lasted on an average six weeks each, giving double the average wear of leather boxes, or buckets. This alone is important in saving time and cost of changing boxes, especially in long lifts, and gutta percha requiring no nails for gearing, the working pieces will doubtless last much longer. On the whole, we much prefer gutta percha to leather for boxes. CHARLES THOMAS.

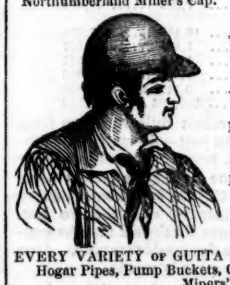
SYPHONS FOR MINES,

FROM MR. A. CROSFIELD, TY MAUR COLLIERY, NEAR PONTY-PRIDD.

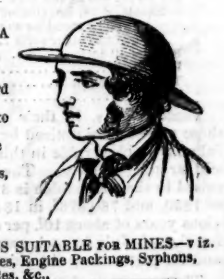
The gutta percha pipe sent me for the purpose of employing it as a syphon for drawing water from a damp heading at these works, answers admirably; and, although the pipe is so small, it is surprising the quantity of water passing through it. I consider that gutta percha piping may be applied in mines and collieries to very valuable purposes, and is especially adapted to be used on the syphon principle, where local circumstances will admit of such application.

MINERS' CAPS.

Northumberland Miner's Cap. Cornish Miner's Cap.



The GUTTA PERCHA CAPS are not only Waterproof, but afford peculiar protection to the wearer from the Falling of Loose Stones, &c. &c. &c.



EVERY VARIETY OF GUTTA PERCHA ARTICLES SUITABLE FOR MINES—viz. Hogar Pipes, Pump Buckets, Clacks, Speaking Tubes, Engine Packings, Syphons, Miners' Caps, Waterproof Soles, &c.,

MANUFACTURED BY THE GUTTA PERCHA COMPANY, PATENTEES, *No.* 18, *WHARF-ROAD, CITY-ROAD, LONDON.*

*** Specimens may be seen on application to the Company's dealers.

51

THE MOST EXTRAORDINARY INVENTION OF PULVERMACHER'S PATENT PORTABLE HYDRO-ELECTRIC CHAIN, is an event of the HIGHEST IMPORTANCE in the annals of MEDICINE and ELECTRICITY.—It relieves, without shock or other disagreeable sensation, instantaneously—the moment it is applied—all acute nervous pains, as rheumatic pains, nervous head, tooth, and ear ache, tic-douloureux, &c.; cures, when worn on the body for some time, by its mild but continuous action, a great number of inveterate diseases, as gout, local paralysis, hysteria, liver complaints, &c.; it precipitates metals from their solutions, decomposes unacidulated water, and shows all other phenomena of a powerful voltaic pile.

The instrument producing these effects weighs about two ounces—can be folded up in a pocket-book—is permanently connected, and ready for instantaneous use—requires, when excited by vinegar, no cleansing, and will, for personal use, last a man his lifetime—guarding not only himself but his family, friends, &c., against an immense number of complaints and diseases in which mild streaming electricity is a perfectly safe, certain, and mostly instantaneous remedy. No knowledge of electricity is necessary to apply the chain.—Incredible as may seem the above-stated facts, every person is welcome freely to test their truth, either at the depôt or at the stall in the Exhibition, Section X., No. 437, where thousands of people are daily admiring the wonderful effects and easy application of this small apparatus, which has, besides, excited the greatest interest at the colleges and scientific institutions in England and on the continent, wherever it has been exhibited.—The apparatus, with full directions for use, may be had at from 4s. 6d. to 22s., at the depôt, 103, Leadenhall-street, City, where the use and effects may be seen daily.

C. MEINIG, Manager.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

THE PROCESS OF ICE BEING MADE IN ONE MINUTE, without the aid of Ice, has elicited from Her Majesty, at the Grand Exhibition, her most gracious approval and unbounded astonishment, by 52

MASTERS & CO.'S PATENT FREEZING MACHINES,

which are now brought to the highest state of perfection; as also are the various MACHINES enumerated below:—

MASTERS'S PATENT FREEZING MACHINE, for making Dessert Ice and Rock Ice from Spring Water, and for Cooling Wine, &c., at a trifling cost.

BUTTER COOLER and FREEZER. ICE PERCOLATING FUNNEL.

ENAMELLED WINE REFRIGERATOR, for Icing Champagne, &c.

MASTERS'S PATENT SHERRY COBBLER FREEZING and COOLING JUG, for producing pure Ice from Spring Water in five minutes, at the cost of 2d., in the hottest climate.—Price 30s. and upwards.

COOLING DECANTER, or CLALET JUG.—COOLING and FREEZING FILTERER.

COOLING CUP, for Surgical purposes, &c. &c. &c.

The PUBLIC is respectfully INVITED to SEE the PROCESS of MAKING ICE, by the above machines, without the aid of Ice—the same process as exhibited by Mr. Masters to Her Majesty, at his Refreshment Rooms, at the Crystal Palace, where 100 quarts of Desert Ice, and large cylinders of Rock Ice are made daily—at Messrs. MASTERS & CO.'S principal DEPOT, 309, REGENT STREET, adjoining the Polytechnic Institution, London.

MASTERS & CO.'S PATENT SODA WATER and AERATING APPARATUS, for charging Water, Wine, Ale, and other Liquids, with pure Carbonic Acid Gas. By this apparatus the purest Soda Water may be obtained at the cost of less than one farthing per glass; and so delicate is the operation, that it may be used in the dining-room. By the addition of the Jargonelle Pear Syrup, manufactured by Messrs. Masters & Co., the most delicious effervescing beverage is produced. Price 30s., and upwards.

N.B.—Syrups from all Fruits, for flavouring Soda Water, making Lemonade, Ices, &c

Also, MASTERS & CO.'S PATENT ROTARY KNIFE-CLEANING MACHINE, manufactured in six different sizes, to clean and brilliantly polish Six to Twelve Knives in One Minute. Warranted to last many years, and not get out of order.—Price 35s. to 6*l.* 6s.

MASTERS & CO., PATENTEES, No. 309, REGENT-STREET,

Adjoining the Polytechnic Institution, London.

STEAM TO INDIA, CHINA, &c.—Particulars of the regular MONTHLY MAIL STEAM CONVEYANCE,

AND OF THE ADDITIONAL LINES OF COMMUNICATION, NOW ESTABLISHED BY THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 53

with the EAST, &c. &c. The Company book PASSENGERS, and receive GOODS and PARCELS, as heretofore, for CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG KONG, by their steamers, starting from SOUTHAMPTON on the 20th of every month, and from SUEZ on or about the 10th of the month.

One of the Company's first-class steamers will, however, be dispatched from Southampton for Alexandria, as an extra ship, on the 3d September and 3d November next, and of alternate months thereafter, in combination with extra steamers, to leave Calcutta on or about the 20th August and 20th October.—Passengers may be booked, and goods and parcels forwarded by these extra steamers to or from SOUTHAMPTON, ALEXANDRIA, ADEN, CEYLON, MADRAS, and CALCUTTA.

BOMBAY.—The Company will also dispatch from Bombay, about the 1st September and of every alternate month thereafter, a first-class ship for ADEN, to meet the extra ship between Calcutta and Suez; and at Alexandria one of the Company's ships will receive the passengers, parcels, and goods, and convey them to Southampton, calling at Malta and Gibraltar.

But PASSENGERS, PARCELS, and GOODS for BOMBAY and WESTERN INDIA will be CONVEYED THROUGHOUT from SOUTHAMPTON in the Mail steamers, leaving Southampton on the 20th of August, 20th of October, and of alternate months thereafter, and the corresponding vessels from Suez to Aden, at which latter port a steamship of the Company will be in waiting to embark and convey them to Bombay.

Passengers for Bombay can also proceed by this Company's steamers of the 29th of the month to Malta, thence to Alexandria, by Her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA: On the 20th and 29th of every month.—CONSTANTINOPLE: On the 29th of the month.—ALEXANDRIA: On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th, 17th, and 27th of the month.

N.B.—Steam-ships of the Company now ply direct between Calcutta, Penang, Singapore, and Hong Kong, and between Hong Kong and Shanghae.

For further information and tariffs of the Company's recently revised and reduced rates of passage-money and freight, and for plans of the vessels, and to secure passages, &c., apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton.

[*Duly Free.*

TO IRONFOUNDERS AND OTHERS.—

The SOUTHAMPTON LOCAL BOARD OF HEALTH hereby give Notice, that they are prepared to RECEIVE TENDERS for CAST-IRON PIPES for the WATER SUPPLY of their DISTRICT.

The specification, plans, and conditions of contract, may be obtained upon payment of 5s., at the office of the Clerk to the Local Board of Health, on or after the 24th day of July instant.

Sealed tenders, endorsed "Cast-Iron Pipes," and addressed "Clerk to the Local Board of Health, Southampton," must be sent on or before the 22d day of August next. 54

By order of the Special Works Committee,
Southampton, July 17, 1851. CHARLES E. DEACON, Clerk.

[*Duly Free.*

TO LAYERS OF WATER-PIPES AND OTHERS.—

The SOUTHAMPTON LOCAL BOARD OF HEALTH hereby give Notice, that they are prepared to RECEIVE TENDERS for LAYING the CAST-IRON MAINS and SERVICE PIPES required for the WATER SUPPLY of their DISTRICT.

The specification and conditions of contract may be obtained, upon payment of 5s., at the office of the Clerk to the Local Board of Health, on or after the 24th day of July inst.

Sealed tenders, endorsed "Pipe Laying," and addressed "Clerk to the Local Board of Health, Southampton," must be sent on or before the 22d day of August next. 55

By order of the Special Works Committee,
Southampton, July 17, 1851. CHARLES E. DEACON, Clerk.

[*Duly Free.*

TO BUILDERS OF STEAM-ENGINES AND OTHERS.—

The SOUTHAMPTON LOCAL BOARD OF HEALTH hereby give Notice, that they are prepared to RECEIVE TENDERS for PROVIDING, FIXING, and SETTING to WORK TWO STEAM-ENGINES, with PUMPS and BOILERS, in duplicate, for the WATER SUPPLY of their DISTRICT.

The specification and conditions of contract may be obtained upon payment of 5s., at the office of the Clerk to the Local Board of Health, on or after the 24th day of July inst.

Sealed tenders, endorsed "Steam-Engines," and addressed "Clerk to the Local Board of Health, Southampton," must be sent on or before the 22d day of August next. 56

By order of the Special Works Committee,
Southampton, July 17, 1851. CHARLES E. DEACON, Clerk

[*Duly Free.*

TO GENERAL CONTRACTORS AND OTHERS.—

The SOUTHAMPTON LOCAL BOARD OF HEALTH hereby give Notice, that they are prepared to RECEIVE TENDERS for MAKING the RESERVOIRS and FILTERING BEDS for the WATER SUPPLY of their DISTRICT.

The specification, plans, and conditions of contract may be obtained upon payment of 5s., at the office of the Clerk to the Local Board of Health, on or after the 24th day of July instant.

Sealed tenders, endorsed "Reservoirs and Filtering Beds," and addressed "Clerk to the Local Board of Health, Southampton," must be sent on or before the 22d day of August next. By order of the Special Works Committee,
Southampton, July 17, 1851. CHARLES E. DEACON, Clerk.

REED'S IRON RAILWAY CHAIRS—(PATENT SEALED OCTOBER 16, 1845).

TO IRONFOUNDERS AND CONTRACTORS.—

The continuous IRON RAIL is adjusted on the roadway, without being keyed into chairs, which are dispensed with; and the IRON BLOCK CHAIRS, where rails are used, are made to supersede the use of stone and timber, forming an entire PERMANENT IRON RAILWAY. The Chairs have been laid on the Newcastle-upon-Tyne and Carlisle Railway for four years, with perfect satisfaction. Their superiority over other chairs, used in combination with stone and timber, is evident, and have the advantage of expedition in adjustment, economy in price, and unquestionable greater durability. 58

The above improvement in railways comprise an entire iron construction, and have priority over other patents for a similar formation.

The Patentee is ready to GRANT LICENSES on payment of a moderate tonnage royalty, or will treat for the absolute SALE of the PATENT, with all claims for infringement.—Apply to Mr. S. Reed, Bank-buildings, Newcastle-upon-Tyne.

TO AGRICULTURISTS.—IMPROVEMENTS IN THE PREPARATION OF MANURES.—

AGRICULTURISTS are INVITED to take SAMPLES of MANURES (Stones's Patent Huminate), free of expense, at the office of the GENERAL PEAT WORKING AND MANURE COMPANY, 6, JOHN-STREET, ADELPHI, LONDON.—The Patent Huminate is free from filthy matter; it consists entirely of concentrated decomposed vegetable organic substances, soluble humic acid, fixed salts of ammonia, with other ingredients, according with soil, plant, and climate. It will promote vegetation in all its requirements, and invariably improve the soil, and can challenge the best guano, at one-third the cost. 59

To every scientific person, or practical farmer (however deficient in knowledge of chemical science), who inquires into the composition of these manures, the folly of bringing guanos to England, even though they cost but one quarter the price now paid for them, will appear most undeniably.

Samples may be had on application at the *Mining Journal* office, 26, Fleet-street.

TO DOCK COMPANIES, WHARFINGERS, COAL, STONE, TIMBER MERCHANTS, AND OTHERS.

PATENT STEAM WHIPPING COMPANY.—

Messrs. E. & A. PRIOR, the Managers of this Company, are now UNLOADING, by means of an ENGINE, their COLLIERS in the THAMES, at an average rate of 20 tons per hour, or upwards of 200 tons per day, and at a considerable reduction in cost.

They have numerous highly satisfactory certificates from captains whose ships they have discharged, and to the owners of which the greatly increased dispatch is obviously a matter of the greatest importance.

The remarkably small dimensions and weight of the engine admits of its being placed on, and removed from, the ship's deck with the greatest facility and dispatch, by means of the barge and derick. 60

These engines are also thoroughly adapted for unloading in the docks, or for permanent use on board all large ships, where, in addition to working out the cargo, they might be most advantageously used for doing all the other heavy work, such as pumping, lifting the anchor, warping, &c.

This company are now prepared to contract for the unloading of any quantity of coals, or to grant Licenses for the use of the patent, on application to the managers,
Messrs. E. & A. PRIOR, 153, Upper Thames-street, London.

PURE PATENT WHITE ZINC PAINT, FROM THE VIEILLE MONTAGNE ZINC MINING COMPANY.—

This Company having become proprietors of all rights and patents of the late Patent White Zinc Company, in France and Belgium, is prepared to furnish, on a large scale, the WHITE OXIDE OF ZINC, in a pure state, and of a quality which can only be manufactured with the zinc from the mines in Belgium. PATENT WHITE ZINC PAINT is superior, in every respect, to White Lead Paint. It is entirely free from all poisonous influences, and is unaffected by sea water, sulphuretted hydrogen, or any gases; besides, it preserves its original colour, which White Lead Paint does not. WHITE ZINC PAINT causes none of those ravages invariably engendered by White Lead upon the human frame; neither painters' cholic or paralysis, &c., &c., to which dangerous complaints the workmen who manufacture and use it are liable, and to which persons who inhabit newly-painted apartments are also liable. A spurious article having been introduced in the market, under the name of White Zinc Paint, the public is cautioned against it, because, when adulterated, it becomes a very inferior paint, instead of a first-rate one. 61

For further particulars and prospectuses, apply to Mr. H. F. SCHMOLL, General Agent for England and Scotland, at the Company's Offices, 12, Manchester-buildings, Westminster-bridge; and for supply of materials and prices, at Messrs. CHARLES DEVAUX and CO., 49, King William-street, City.

STIRLING'S PATENT YELLOW METALS—Adapted for

SHEATHING, BOLT STAVES, BOLT NAILS, DECK NAILS, as reported on by the late Mr. Owen, Supervisor of Metals to the Admiralty; also for PROPELLERS, FRAMEWORK SCREWS, PISTONS, CYLINDERS, COCKS (particularly where there is exposure to corrosion), RAILWAY CARRIAGE AXLE BEARINGS, and for all machinery subject to friction. AGENTS.

Messrs. JOHNSON, 166, Buchanan-street, Glasgow. 62

Applications for licenses and other information to be addressed to the undersigned,
ALFRED BARRETT, Bishopsgate Foundry, Skinner-street.

TO THE MINING AND SHIPPING INTERESTS.

WIRE AND HEMP ROPES.—MANUFACTURED under PATENT GRANTED TO JAMES B. WILSON,

HAYDOCK ROPE-WORKS, NEAR WARRINGTON. 63

Applicable to SHIPPING, INCLINED PLANES, MINES, COLLIERIES, &c.; as also to WIRE CABLES for SUBMARINE, OVERLAND, and UNDERLAND TELEGRAPHS.

Sizes, with comparative weights and strength, as also price per cwt. or fathom, may be obtained on application to the patentee.

All sizes of wire strands, railway signal lines, flat and round copper rope, lightning conductors, window sash lines, &c.—Warrington, July 5, 1851.

BRAICH GOCH SLATE AND SLAB QUARRY COMPANY,

MERIONETHSHIRE, NORTH WALES.

Capital £14,000, in 3500 shares, at £4 per share.

TO BE CONDUCTED ON THE COST-BOOK SYSTEM.

MANAGERS.

THOMAS WAKEMAN, Esq., of Chalfont St. Giles, Bucks.
ROBERT JACKMAN, Esq., Half-street, Gloucester.
ARTHUR CAUSTON, Esq., civil engineer, Barton-street, Gloucester.
WILLIAM REES, Esq., architect, Clarence-street, Gloucester.
WILLIAM WINGATE, Esq., builder, Clarence-street, Gloucester. 64

BANKERS.

LONDON—Messrs. Spooner, Attwood, and Co., No. 27, Gracechurch-street.
GLOUCESTER—National Provincial Bank of England.

INSPECTING ENGINEER—St. Pierre Foley, Esq., civil and mining engineer.
AGENT AT QUARRIES—Mr. Thomas Smith Nicholls.
SECRETARY—Mr. John Fish.

This company is formed for the purpose of extenting the operations of the quarries known under the name of the Braich-Goch Slate and Slab Quarries, forming part of the far-famed bands of the Aber Cerris slate and slab district, east of Cader Idris mountain range, in the parish of Taly-Llyn, county of Merioneth, in the principality of Wales, comprising 111 A., 2 R., 18 P., and 7 miles from the shipping port of Aberdovey, to which the main road runs. A line of railway is in projection from the quarries to the above-named shipping port. This property is held on lease for 50 years, 43 of which are unexpired, at a present rental of £60 per annum, increasing £10 every seven years, or 1-10th royalty.

The character of the slate is of the very best description, and of that fine blue colour so much in demand by architects and builders, and peculiarly adapted for enamelling, and every description of ornamental work.

These quarries have been in the possession of the present proprietors several years, during which time they have expended upwards of £3000 in driving levels, opening quarries, and forming slate floors at different altitudes; erecting engine-house, water-wheels, and machinery; building offices, and other useful and necessary works.

The present proprietors have thus at their own cost thoroughly tested and developed the capabilities of these quarries, and being desirous to extend the works by erecting more extensive machinery, and opening the quarries on a scale commensurate with their capabilities, have resolved to augment the capital to be employed in these operations, and purpose to divide the quarries into 3500 shares, at £4 per share, making a capital of £14,000.

The proprietors, in order to show their confidence in the value of the property, propose to accept for their interest therein £5800, for which they agree to take £4800 in shares, and £1000 in cash; thus leaving 2300 shares to be disposed of. This will provide, after payment of the £1000, a working capital of £6200, available exclusively for the more extended operations suggested:—That the first deposit of £1 10s. per share be paid allotment. All remaining calls not to exceed 10s. per share, of which 14 days' notice will be given, agreeable to the rules of the company. The proprietors feel confident that the full amount of £4 per share will never be required; they, therefore, propose that when the quarries are in a returning state, and paying dividends, and consequently no further calls required, the balance remaining shall be called in and invested in Government securities, to form the reserve fund; the interest thereon to be for the benefit of the shareholders.

The unlimited demand for slates and slabs renders the sales at all times a matter of certainty. It is a well-known fact that no description of investment yields a more ample return than good slate quarries. These are deemed equal to any slate quarries now in operation—similar to those in North Wales, now paying from £30,000 to £100,000 per annum respectively. The lucrative character of the investment may, therefore, be relied upon with certainty.

The chief outlay and risk in slate quarrying are attendant on the opening of the rock and proving the quality of the slate; in this case these quarries have been fully proved, and only require to be extensively opened.

The proprietors, in submitting this undertaking to the public, particularly wish it to be understood that this must not be classified with a speculative adventure; it being both a solid and *bonâ fide* channel of investment.

Every information given at the offices of the company, Cushion-court, Old Broad-street; at Mr. J. Lane's, mining broker, 52, Threadneedle-street; at Messrs. Brooks and Co., 209, Piccadilly; and of Arthur Causton, Esq., 5, Barton-street, Gloucester; where samples of slate and slabs may be seen, and prospectuses and forms of application for shares obtained. JOHN FISH, Secretary.

London, Cushion-Court, Old Broad-street, July, 1851.

START BAY SLATE COMPANY—STOKENHAM,

SOUTH DEVON.—ON THE COST-BOOK SYSTEM.

Capital £8000, in 4000 shares, of £2 each.—Deposit £1 per share. 65

The Start Bay Slate Quarries possess every advantage that can be desired, both in the quantity and quality of the slate, and the facility of shipment.

Application for prospectuses (with the names of the directors), and for the remaining shares, to be made to the secretary, Mr. Joseph Maitland, 12, Copthall-court; to Mr. Nicholson, solicitor, 90, New Bond-street; to Mr. Archibald Hudson, 4, Angel-court, Throgmorton-street; or to Mr. R. E. Little, 11, Warnford-court, Throgmorton-street.

SILVER BROOK AND WEST BEAM UNITED MINES

(SILVER-LEAD, TIN, and COPPER), ILSINGTON and ASHBURTON, Devonshire.

ON THE COST-BOOK SYSTEM. 66

In 7600 shares, of £1 each, paid-up.

Prospectuses, with names of committee, and extracts from Reports of Mr. Adam Murray, jun., Capt. Prince, and others, may be obtained of Mr. James Nicholson, solicitor, 90, New Bond-street, London; Messrs. H. Caunter and Co., mining agents, Ashburton, Devonshire; or Mr. George Caunter, solicitor, Ashburton; or Messrs. H. Boxall and Co., 7, George-yard, Lombard-street, London,—to any of whom application may be made for the remaining shares.

CARDIGANSHIRE MINING ASSOCIATION.—

In certificates of five shares each, in 10,000 shares, of £2 each.

Conducted on the Cost-book Principle, without further call.

COMMITTEE OF MANAGEMENT.

GEORGE HARRIS CHILD, Esq., 48, Mark-lane.
THOMAS HAWES, Esq., Club Chambers, Regent-street.
HENRY FRANCIS HOME, Esq., 106, Gloucester-terrace, Hyde-park. 67
GEORGE HELMORE, Esq., Millbank-street, Westminster.
JOHN PETER KNIGHT, Esq., Hibernia Chambers, London-bridge, Southwark.

BANKERS.

Messrs. Rogers, Olding, and Co., Clement's-lane, Lombard-street.

OFFICES,—32, GREAT WINCHESTER-STREET.

Prospectuses and reports can be obtained on application at the Company's offices, 32, Great Winchester-street; or to Edw. Lloyd Morgan, Esq., stockbroker, Bank Chambers.

ST. AGNES BEACON TIN AND COPPER MINE,

CORNWALL.—Capital £2625, in 2500 shares, of £1 1s. each.

ON THE COST-BOOK SYSTEM, 68

And in conformity to the Stannary Laws; held under the Duchy of Cornwall for 21 years, at 1-15th royalty.

To be governed by a committee, selected by the shareholders, in preference to a self-constituted board of directors.

The parties bringing this concern before the public can safely refer to any of the mining agents around the parish of St. Agnes; they do so rather than offering any recommendatory reports they might themselves produce.

About £3000 worth of work has already been completed, which this company avail themselves of. The present party, few in number, have expended one-half that sum, and only receive that amount (in shares and money), asking no premium; nor is there any debt or liability upon the concern. It has been a private adventure. A sufficient number of labourers are at work in the adit, making preparations for a larger body of them, which will be employed as soon as the present arrangement for increasing the capital is effected.

No steam-engine will be necessary, or other expensive machinery; the additional capital now required is only £1000. A considerable portion of the shares are already subscribed for, the remainder will be distributed to the earliest respectable applicants, who will be entitled to their full proportion of all the profits that may be derived from the workings from the date hereof.

The share list being nearly full, early applications, in the usual form, with references, will be received until the 26th inst., by F. W. Pike, Esq., 26, Bedford-row; Mr. E. O. Parkinson, 9, George-yard, Lombard-street; and Mr. John Morgan, sworn broker, No. 2, Copthall-court, London,—where plans and reports may be inspected.

Dated August 1, 1851.

WEST CAMBORNE MINING COMPANY.

Divided into 5000 shares.—Deposit 20s. per share.

CONDUCTED ON THE COST-BOOK PRINCIPLE. 69

LONDON OFFICES,—3, GEORGE-YARD, LOMBARD STREET.

These mines are in the same stratum of ground, and stand parallel to, and east and west of, Wheal Grenville, Tolcarne, Condurrow, Wheal Harriet, West Frances, South Frances, West Basset, North Basset, South Basset, and numerous other valuable and productive mines. They are held under lease for 21 years, at 1-18th dues, being situate in the western part of Camborne, in the county of Cornwall—the most metalliferous district in the world. The sett is traversed by many east and west lodes, which present on the backs the usual indications of the district—*viz.*: gossan, quartz, blende, iron pyrites, fine specimens of grey and oxide of copper ore, together with other metallic concomitants. Several slides and cross-courses intersect the lodes, of known importance; a fine elvan-course exists about the junction of the killas and granite, which takes place in the Company's grant.

From the ablest and most careful judgments of the oldest and best mining agents in Cornwall, £6000 is deemed amply sufficient to purchase and erect the necessary machinery, and bring the mines into profitable and good working order; therefore, it is proposed to sell 3000 shares, at £2 each, and the remaining 2000 shares to be retained by the proprietors for the transfer of the property, leases, and remuneration for work done.

The following few mines, situate in the same district, and within a short distance of the Company's grant, have paid, during the past half-year, £38,042 in dividends—the whole expenditure to realise which was £80,022, and the present market value of the same is £645,840. Thus it will be seen that the average return is £95 per cent. per annum upon the original cost, and upwards of £11 15s. per cent. per annum upon the current market value of shares. The aggregate amount of profits from these mines, divided, exceed £675,000—thus returning to the fortunate shareholders more than eight times their outlay, and the prospects of continued success at present being equal to any period of their existance.

	Outlay.	*Div. last 6 months.*	*Market Value.*
Wheal Buller	£ 1,280	£8320	£134,400
Carn Brea	15,000	7000	105,000
South Wheal Frances	19,840	5954	64,480
South Wheal Basset	2,620	5120	102,400
North Pool	4,500	4500	50,000
Wheal Seton	21,186	1980	49,500
South Tolgus	4,696	1920	40,960
North Roskear	10,000	1750	21,000
North Wheal Basset	1,500	15 0	78,000
Total	£80,022	£38,042	£645,840

The expenditure, price, and profits divided, as far as can be gathered, are stated above. Many other mines in the neighbourhood, not valued, are selling at considerable premium, and fast approaching dividends; but as the market price partakes more of a speculative than intrinsic value, and subject to constant changes, they are omitted.

Applications for shares to be made to the secretary, Mr. H. B. Bousfield, at the Offices of the Company; and to Messrs. Tredinnick and Co., 3, George-yard, Lombard-street, London, of whom prospectuses and all further particulars can be obtained.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.

TO THE SHAREHOLDERS. 70

GENTLEMEN.—Despatches have been this day received from Sir Henry Huntley, dated San Francisco, 14th June, 1851, by which it appears that objections which have been insinuated by persons hostile to the Company, and complained of by others, are set at rest. Sir Henry Huntley has inspected several of the richest localities yet discovered in California, and has selected four most advantageous sites for operations, and had his right to them recorded in accordance with the custom in California. He has, moreover, made arrangements for carrying out his operations as soon as the Company shall have become completely registered. The necessary steps are being taken to co-operate strenuously with him; and by the time this Company is completely registered, the Directors will be prepared to lay a most satisfactory statement before the shareholders of the progress which has been made with reference to the prospect of success open to this Company.

By order of the board, GEORGE FREDERICK GOODMAN, Sec. pro tem.
11, Adam street, Adelphi, August 4, 1851.

SOURTON CONSOLS COPPER MINE.—

The lodes of which are parallel with the main lode of the Great Wheal Friendship; from which £1,132,662 worth of ore has been raised, and leaving a clear profit to the adventurers of £286,574 4s. 0d.—Divided into 1024 shares.

CONDUCTED ON THE COST-BOOK PRINCIPLE.

512 shares have been taken up by shareholders in mines in the immediate neighbourhood; the remaining 512 shares will be issued to the public at £2 10s. each, which includes a call of 10s. already made upon the 1024 shares for working expenses. 71

COMMITTEE.

JOSEPH EDGECUMBE, Esq., Tavistock.
CHARLES JOHN WICKER, Esq., Mile End-road.
SAMUEL WEATHERLY, Esq., St. James'-place, New Cross.
THOMAS FULLER, Threadneedle-street.

BANKERS.—Devon and Cornwall Bank, Tavistock.
MANAGING AGENT.—Captain John Lean, of Wheal Franco.
PURSER.—George Budge.

OFFICE.—51, THREADNEEDLE-STREET, LONDON.

This sett extends about a square mile and is most conveniently situated near Tavistock, Devon; there has been several most promising lodes discovered in this sett, the principal one being regular and well-defined, extending for about 600 fathoms on the course of the lode, and running a little north of west and south of east, as is the case with the copper lodes of this district, such as at the Great Wheal Friendship, and from which upwards of £286,574 4s. nett profit has been realised; and also Mary and Peter Tavy Consols, a mine of great promise.

A shaft is sunk 10 fathoms upon this most promising lode, which is 9 feet wide, composed of the most kindly gossan, and bearing a strong resemblance, and being similar to, the gossan of the Devon Great Consols, and containing spots of copper ore, &c., from which some fine stones of grey copper have been taken, and will, on further explorations, realise those results from such indications at such shallow depths, and afford a strong presumption that large deposits of ore will be met with at a moderate depth.

There is an engine-shaft sunk to a depth of 18 fathoms, at a distance north calculated to cut the lode at 35 fms. deep, the ground being of the same blue killas as Wheal Emma of Devon Great Consols, and being of an easy nature for working. A reference, however, to Mr. Jehu Hitchin.'s subjoined report will give a better idea of the nature and capabilities of this property, and whose recommendations it is proposed to carry out.

There is an abundant supply of water at all seasons of the year; and it is intended at once to erect a powerful water-wheel and other necessary machinery, for the purpose of hauling, dressing, &c.

The lease of this valuable property having been recently obtained, after much difficulty, by the present proprietors, for the remainder of the term of 15 years at 1-15th dues; and upwards of £4000 has been expended in the execution of preliminary and permanent works now available for the purposes of the present company, who are willing to dispose of a limited number of shares at £2 10s., which includes a call of 10s. for working capital, this being sufficient to bring the mine into a working state.

The accompanying report fully explains the character of the property and the inducements held out for developing the lodes already discovered. Specimens of the gossan may be seen at the office of the company, where every information may be obtained, and applications for shares and prospectuses made to T. Fuller and Co., 51, Threadneedle-street, London; Capt. John Sims, Calstock, Cornwall; and Messrs. Sims & Co., Tavistock.

SOURTON CONSOLS.

Tavistock, June 14.—Having, at the desire of several of the shareholders, carefully inspected this sett, and the workings thereof, with a view to submit my report of the adventure, I beg to state as follows:—1st. The backs of the lode, as seen in the shode pits and the shaft, present the most promising appearance for copper ore that I have for a very long time seen, being in effect a similar large and kindly gossan to the back of the Devon Great Consols lode, as first discovered in Wheal Maria.—2d. The lode also is a regular one from 9 feet upwards in width, running about east and west, underlaying north about 3 ft. in a fathom, with good walls, analogous to and parallel with the Great Wheal Friendship main lode, and in a congenial killas stratum bordering on the granite formation about a mile to the eastward, and from which some copper ore has been taken in an adit west.—3d. A deal of useful work is done besides 18 fms. sunk in the engine-shaft, which is calculated to take the lode at 35 fms. deep. A good waterwheel and other appliances of sufficient power to drain the mine to a considerable depth can be had. I would recommend the sinking this engine-shaft to the depth proposed, and drive east and west in that level, and possibly an intermediate one also. In conclusion, I strenuously advise that this kindly undertaking be immediately resumed, and the trials I have stated made, the more especially as so much as been done, the which, without a further prosecution, can only be regarded as money thrown away. I, therefore, hope shortly to see operations actively carried out, the which there can be no doubt but that the appearances fully warrant, and I should like to have a few shares in the adventure myself.

JEHU HITCHIN.

GREAT WESTERN RAILWAY OF CANADA.

R. W. HARRIS, Esq., President,

With Ten Directors, elected annually by the Shareholders.

BANKERS.

The Bank of Upper Canada, Canada; the Union Bank of Scotland, Edinburgh & Glasgow. Messrs. Glyn, Mills, and Co., London.

AGENTS IN THIS COUNTRY. 72

PETER BUCHANAN, Esq., Glasgow.
R. S. ATCHESON, Esq., Temporary Office, 6, Warnford-court, Throgmorton-st., London

The Great Western Railway of Canada forms part of the grand trunk line of railway communication through the provinces of Canada, New Brunswick, and Nova Scotia. It commences at the city of Hamilton, at the head of Lake Ontario, and thence runs to Port Windsor, opposite Detroit, at the head of Lake Erie, with two branches—one to the Falls of Niagara, and the other to Port Sarnia, at the foot of Lake Huron.

As a national work its importance is unquestionable, for, while it forms a direct trunk line for the traffic of the principal districts of Canada, and of these, with the seats of commerce in the sister provinces, it will be the main channel for the stream of emigration from this country by the way of the St. Lawrence, to the western sections of Canada, the great resort of British emigrants.

As a highly remunerative enterprise, it possesses the further advantage of forming a completing link in the railway communication between the western states of America and the upper valley of the Mississippi on the one hand, and Boston and New York and the seaboard of the Atlantic on the other.

The Legislature of Canada has granted the company the most ample powers, with the privilege of raising a capital not exceeding £1,500,000, in shares of £25 currency each (equal to £20 11s. sterling), but an Act of the Provincial Parliament, recently passed, renders it unnecessary to issue shares for that amount; and the directors in April last resolved to limit the present issue to 40,000 shares, of which 10,000 have been reserved for Great Britain. Of those appropriated to Canada and the United States, the whole amount, with the exception of a small reserve for specific purposes, has been disposed of, and recent payments have enabled the directors greatly to extend the work given out to the contractors, and sanguine expectations are entertained that some portions of the road will be open this year, and the whole completed next year.—The responsibility of the shareholders is strictly limited to the amount of each shareholder's subscription.

Prospectuses, with the terms of subscription, a map and profile of the line, and two sketches, showing its connection with other railways, may be obtained on application, by letters addressed (pre-paid), "To the Agents of the Great Western Railway Company of Canada," at their offices, 6, Warnford-court, Throgmorton-street, London; or to Peter Eckersley, Esq., agent for Manchester and the surrounding districts, at his office, Bull's Head chambers, Market-place, Manchester.

GREAT WESTERN RAILWAY OF CANADA.—

At a MEETING of Gentlemen, convened by private circular, by John Bannerman, Esq., held at the Albion Hotel, Manchester, on the 30th of July, 1851, to meet a deputation from the Company, consisting of Peter Buchanan, Esq., of Glasgow, and R. S. Atcheson, Esq., of London, appointed by the Board of Directors in Canada as their Agents in this country. 73

PRESENT:

HENRY HOULDSWORTH, Esq., in the chair.

Samuel Laing, Esq., Chairman of the London and Brighton Railway.	
John Bannerman, Esq.	H. B. Jackson, Esq.
Robert Gardner, Esq.	P. Eckersley, Esq.
Jeremiah Garnett, Esq.	Major Douglas, of Bute.
John Todd, Esq.	William Fisher, Esq., Liverpool.
William Rawson, Esq	Isaac Buchanan, Esq., ditto,
Thomas Boothman, Esq.	and others.

After hearing the statements of the deputation, and the views of several other gentlemen, it was unanimously resolved,—

That, in the opinion of this meeting, the Great Western Railway of Canada is an undertaking of great national importance, and appears to afford a highly advantageous investment for capital.

That a Subscription List for shares in the undertaking be forthwith opened; and that this meeting has no hesitation in recommending that the unappropriated stock mentioned in the prospectus be subscribed for in this country.

That John Bannerman, Esq., Henry Houldsworth, Esq., Robert Gardner, Esq., and Robert Barbour, Esq., be appointed a local committee, in furtherance of the above object.

That Peter Eckersley, Esq., be appointed agent to the undertaking in this district; to whom application for shares or further information may be made, at his office, Bull's Head Chambers, Market-place, Manchester.

A PRACTICAL TREATISE ON MINING.

Just published, in 1 vol., royal 8vo., by John Weale, 59, High Holborn, price 12s. 6d.

A PRACTICAL TREATISE ON THE WORKING AND VENTILATION OF COAL MINES—

Illustrated with 16 large-sized plans. By JOHN HIDLEY, Colliery Viewer and Mining Agent, Wigan, Lancashire. 74

This work contains advice to underground managers on their duties, and suggestions for improvements in several neglected points of practical detail, with much other useful information on the management of mines.

SEWERAGE OF LONDON.—The ATTENTION of the

COMMISSIONERS appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING of BRICK CULVERTS and OTHER CHANNELS for DRAINAGE.

The experiments made by the Royal Artillery on the embrasures of Plymouth Citadel, constructed of Seyssel Asphalte Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphalte over all other cementitious compositions. A printed account of these experiments can be had on application to J. FARRELL, Secretary,

Seyssel Asphalte Company—"Claridge's Patent."—Established 1838.

Note.—The application of the Asphalte of Seyssel is specially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the *areas* of closed *grave yards*, and for the construction of *catacombs*.

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Dividends per Share Declared.	Last Paid.	Last Price.	Present Price
5120	Alfred Consols (copper), Phillack	3	£ 1 13 to 1st Aug.	£0 6 0 Aug.	13½ 14½	13 14 14½
1248	Allt-y-Crib (silver-lead), Talybont, Wales	5	0 2 6 to August	0 2 6 „	10	7½ 8
1624	Balleswidden (tin), St. Just	11½	8 11 to June	0 5 to June	10	
4000	Bedford United (copper), Tavistock Devon	2½	2 12 to June	0 4 to June	7½	7½
64	Boscaswell Downs (tin), St. Just	—	750 0 to May, 1849	—	100	
100	Botallack (tin and copper), St. Just	182½	440 0 to 5th April	5 0 to May	200 205	
1000	Bryntail, Llanidloes, Montgomeryshire	2½	0 5 to end June	0 5 to June	16 17	
1000	Callington (lead and copper), Callington, Devon	29	6 0 to Sept., 1847	—	6¾	
1000	Carn Brea (copper and tin), Illogan	15	202 0 to June, 1851	2 0 to June	105	
1024	Chyprase, St. Enoder (tin and copper), Cornwall	3½	2 6 8 —	—	6½	
128	Comford (copper), Gwennap, Cornwall	65	— —	—	40	50
256	Condurrow (copper and tin), Camborne, Cornwall	20	11 0 —	—	105	100 105
1024	Devon Great Consols (copper), Tavistock	1	239 10 to Aug.	7 0 to Aug.	295 300	300 295
180	Dolcoath (copper and tin), Camborne	252	855 14 to 1847	—	16	
128	East Pool (tin and copper), Pool, Illogan, Cornwall	24½	233 0 to 1843	—	165 170	
94	East Wheal Crofty (copper), Illogan, Cornwall	125	242 10 —	—	120	150
128	East Wheal Rose (silver-lead), Newlyn	50	2215 0 to 25th July	15 0 to July	550	
494	Fowey Consols (copper), Tywardreath	40	— —	—	30	
3750	General Mining Company for Ireland (copper)	1½	35 per cent. to June	10 per ct. ½ year	5½	
100	Goginan (lead), Cardiganshire, Wales	5	440 0 „	—	200	
96	Great Consols (copper), Gwennap, Cornwall	1000	353 6 8 to January	—	200	
119	Great Work (tin), Germoe	100	110 0 to June	7 10 to June	200	
1024	Herodsfoot (lead), near Liskeard, Cornwall	8	— —	0 5 „	6½ 7	
1000	Holmbush (lead and copper), Callington	24	25 0 to Feb., 1844	Feb., 1844	13½ 14½	
1000	Lewis (tin and copper), St. Erth	17	2 0 to 1st Aug.	0 10 to Aug.	20 21	21 22
160	Levant (copper and tin), St. Just	2½	1030 0 to 5th June	5 0 to June	150 155	
100	Lisburne (lead), Cardiganshire, Wales	75	640 0 to 1st Aug.	20 0 to Aug. 1	700	
5000	Low's Patent Copper Smelting Company	9	1 0 6 to July	0 4 6 to July 1	10	
20000	Mining Company of Ireland (copper, lead, and coal)	7	7 10 6 to Feb., 1847	7 p. ct. p. annum	4½ 4½	4½
200	North Pool (copper and tin), Pool	22½	210 0 to 1st Aug.	7 10 to Aug.	235	210 220
140	North Roskear (copper), Camborne	10	220 0 to ditto	7 0 to Aug.	155	175
6000	North Wheal Basset (copper and tin)	¼	1 1 to 5th April	—	15	
128	Par Consols (copper), St. Blazey	55½	374 0 —	—	650	
1160	Perran St. George (copper and tin)	21½	1 15 to June	0 10 to 4th June	40	
560	Providence Mines (tin), Uny Lelant	20½	11 17 to February	1 0 to May	25	
256	South Caradon (copper), St. Cleer	2½	255 0 to July	2 10 to July	125 130	120 125
256	South Tolgus (copper), Redruth, Cornwall	16	24 0 to 5th June	2 10 to June	160	
248	South Wheal Frances (copper), Illogan	80	95 15 to 10th July	6 0 0 to July	260	
1024	Spearne Consols (tin), St. Just, Cornwall	1½	3 7 6 to June	0 12 6 to June	8½ 9	
94	St. Ives Consols (tin), St. Ive's	80	851 0 to February	5 0 to May	80	
1000	Stray Park and Camborne Vean (copper), Cornwall	15	11 10 —	—	14½ 15	14½ 15
9600	Tamar Consols (silver-lead), Beeralston	4	2 11 to July, 1847	—	4½ 4½	
6000	Tincroft (copper and tin), near Pool	7	5 17 6 to Sept.	—	7 7½	7½ 8
256	Trehane (silver-lead), Menheniot	1½	26 15 to August	1 0 to Aug.	15	
5000	Treleigh Consols (copper), Redruth	6	1 3 to Oct., 1847	0 5 Oct. 1847	2½	2½ 2½
96	Tresavean (copper), Gwennap, Cornwall	20	4680 15 to 1848	—	230	
120	Trethellan (copper), Gwennap, Cornwall	5	402 10 to 5th April	—	14	13
120	Treviskey and Barrier (copper)	130	239 15 to August	9 10 to Aug.	200	205 200
1024	Wellington (copper & tin), Perranuthnoe	6½	2 2 6 „	0 5 to March	7	
256	West Caradon (copper), Liskeard, Cornwall	20	160 5 to June	2 10 to June	107	
512	West Providence (tin), St. Erth	10	— —	—	90	90
256	Wheal Basset (copper), Illogan	10½	235 0 to 3d June	10 0 to 3d June	392½	392½
256	Wheal Brewer (copper), Gwennap, Cornwall	2	5 0 —	—	6½	7½
256	Wheal Buller (copper), Redruth	5	96 10 to 1st Aug.	12 10 to August	550	
126	Wheal Friendship (copper) Devon	120	2325 10 —	—	120	
5000	Wheal Golden Consols (silver-lead), Perranzabuloe	3	1 0 to July	0 5 to July	10	
430	Wheal Lovel (lead and tin), Helston	—	4 0 to 5th April	2 0 to June	20	
112	Wheal Margaret (tin), Uny Lelant	79	179 0 to March	3 0 to May	135	
512	Wheal Mary Ann (lead), Menheniot	5½	18 5 to 21st May	3 0 to May 21	58	58 59 60
40	Wheal Owles, St. Just, Cornwall	200	— —	—	235	
240	Wheal Reeth (tin), Uny Lelant	20½	22 10 to February	2 10 to May	80	
198	Wheal Seton (tin and copper), Camborne, Cornwall	107	190 10 to 5th April	5 0 to April	190	
520	Wheal Trelawny (silver-lead), Liskeard, Cornwall	3½	26 10 „	2 0 to May	56	56 57
1024	Wheal Tremayne (tin and cop.), Gwinear, Cornwall	9½	5 10 to June	0 10 to June	23½ 25	24½ 25
5000	Wicklow (copper), Wicklow	5	295 per cent. „	18 p. ct. end June	25½	25½

FOREIGN MINES.

5000	Alten Mining Company (copper), Norway	14½	3 0 0 to Mar., 1848	—	3	2 2½
10000	Brazilian Imperial (gold), Brazil	24½	3 17 6 to Dec., 1844	—	2½ 3	
12000	Cobre Copper Company (copper), Cuba	40	45 12 0 to June 1851	3l. to June	39	36 35½36½
10000	Copiapo Mining Company (copper), Chili	14	3 3 0 to Oct., 1850	8s. to Oct., 1850	6½ 6½	6
20000	General Mining Association (iron & coal), Nova Scotia	20	6 10 0 to June, 1851	10s. June, 1851	14	
2700	Marmato (gold), Columbia	2½	2 0 0 to June, 1851	1l. to June, 1851	12	
5051	Mexican Company (silver), Mexico	59½	0 8 6 end of 1846	4s. in 1846	—	
7000	Royal Santiago (copper), Cuba	10	33 4 0 to July, 1846	—	3	
11000	St. John del Rey (gold), Brazil	15	12 17 6 to Dec., 1850	1l. 10s. to June 7	19½ 19½	19½
43174	United Mexican (silver), Mexico Av.	28½	1 12 6 to Feb. 1851	7s. 6d. Feb., 1851	2½	2½

Shares.		Paid.	Last Price.	Present Price.
1024	Appledore (silver-lead and cop.) St. Ives	2½	2½	
940	Balnoon Consols (tin), Uny Lelant	—	4	
5000	Bargally (lead), Cairnsmore	—	1	
905	Barristown (lead), Carrick	½	½	
3650	Bawden (silver-lead) St. Teath	¼	¼	
1508	Bell and Lanarth (copper), Gwennap	5	—	
256	Berriew (copper), Liskeard	2½	3	
1500	Bishopstone (silver-lead), Glamorganshire	2½	10	
32	Black Burn, Alston, Cumberland	20	100	
5000	Black Craig (lead), Kirkcudbrightshire	5	5	
8000	Blaenavon (iron), South Wales	50	12	
1024	Bodmin Consols (lead), Wadebridge	6	5	
6000	Bodmin Moor Consols (tin and copper)	1	5½	
1024	Bodmin Wheal Mary (copper), Bodmin	8	9	
6000	Bolenowe	2½	4	
40	Bolowall and Nanpean (tin), St. Just	—	20	
1024	Boringdon Park (silver-lead), Plympton	1	4½	4
240	Boscean (tin), St. Just	12½	10	
2400	Bosorn (tin), St. Just	1	2	
1024	Bottle Hill (copper) Plympton	1	1	
256	Bridford Consols	1½	1	
10000	British Iron, New, regis. (iron)	12	8	
—	Ditto ditto, scrip	10	10	
2000	Bronfloyd (lead)	1	1½	1½
2400	Bryn-Arlan (lead), Cardiganshire	2½	1½	1
812	Butterdon (lead), Menheniott	3½	7	
2000	Bwich Consols (silver-lead), Cardiganshire	4	4	1½
1000	Cae-Gynon (silver-lead), Cardiganshire	½	4½	
4000	Calstock United (copper)	5	5	
3000	Cally (copper and lead), Kirkcudbrightsh.	1	1½	
1000	Camborne Consols (copper), Camborne	7	4	
20000	Cameron's Steam Coal (coal), Swansea	10	2 2½	
1168	Caradon Great Cons. (cop.), Linkinhorne	7	3	
1536	Caradon Vale (copper and lead), St. Ive	3½	1½	
6000	Caradon Wood (lead), Linkinghorne	—	2½	
1000	Carbona (tin and copper), Crowan	5	5	
512	Carn Galver, Morvah	1½	3	
5120	Carn Valley, St. Dennis	1	2	
3000	Carthew Consols (cop. & lead), Wadebridge	4½	6	
1056	Carvannall (copper), Gwennap	3	17½	13 15
2000	Cassandra Anne (lead & cop.), Stoke Clim.	5	5½ 6	
200	Cefn Bruno (lead), Cardiganshire	13	54	
5000	Cefn Gwyn (silver-lead), Cardigan	1	1½	¼
1024	Ciljah and Wentworth (tin & co.), Redruth	1½	5	4½
—	Cockley Beck (copper), Lancashire	6	—	
2510	Cook's Kitchen (copper and tin), Illogan	15½	5½ 6	6½
1000	Copper Bottom (copper), Crowan	7	8	
900	Court Grange (silver-lead), Cardiganshire	10	12	
211	Craddock Moor (copper), St. Cleer	29½	9½	
1600	Craig-y-Mwyn (lead), Llanrhiadr, Mont	8½	10½	
256	Crane and Bojawsa (copper), Camborne	20	27	
1000	Cwm Daren	1	3	
1000	Cwm Erfin (lead), Cardiganshire	6	3½	
2000	Cwm Sebon	—	4	
128	Cwmystwith (lead), Cardiganshire	60	100	
2000	Cyfannedd Fawr (lead), Lanegryn	¼	¼	
3000	Dairhiew (copper and lead), Brecon	1½	10	
1000	Daren (silver-lead), Cardiganshire	2	7	
7100	Derwent (silver-lead), Durham	10	3	
5000	Devon Consols North (cop.), Lamerton	2½	2½	
4160	Devon and Courtenay Consols (copper)	2	1½	1½
768	Devon Great Tineroft, North Bovey	¼	6	
1000	Dhurode (copper) Ireland	2	5	
672	Ding-Dong (tin), Gulval	5	7	
4000	Dolfrwynog (copper), Merioneth	¼	¼	
2560	Drake Walls (tin and copper), Calstock	6½	5	
128	Drift Moor (tin), Sancreed	1	1½	
1536	Duke of Cornwall (copper), St. Winnon	1	2	
3000	Dyfngwm (lead)	16	10	
1024	East Balleswidden (tin), Sancreed	2½	2	
256	East Basset (copper) Redruth	16	17	
2500	East Birch Tor, (tin), near Ashburton	3	3	
2048	East Boringdon Park, Plympton	¼	¼	
1024	East Buller (copper), near Redruth	3½	4	4½
128	East Carn Brea (copper), Redruth	4	3	
1948	East Crowndale (copper), Tavistock	7½	1	1
300	East Daren (lead), Cardiganshire	13	30	
256	East Godolphin (copper), Crowan	17½	21	
4000	East Gunnis Lake Junction (copper)	¼	2	
512	East Seton and Wheal Maude, Redruth	5½	4	
9000	East Tamar Consols (sil.-lead), Beerferris	1½	1½	
256	East Tolgus (copper), Redruth	5½	7½	
1000	East Trescoll	1	3½	
256	East Tywarnhayle (copper), St. Agnes	14	5	
500	East Wheal Ellen (tin & cop.), St. Agnes	1½	1½	
256	East Wheal Frances (copper), Illogan	6½	8	4
2048	East Wheal George (cop.), Walkhampton	1	10	
2048	East Wheal Josiah (copper), Tavistock	1½	¼	
512	East Wheal Leisure (copper)	9	15 17	
1024	East Wheal Margaret (tin and copper)	4½	1½ 1½	4½ 5
3000	East Wheal Rashleigh, Lanreath	2½	3s	¼ ¼
1000	East Wheal Reeth	1½	1½	
4000	East Wheal Russell (copper), Tavistock	¼	3½	4 4½
1250	Esgair Llee Llanfihangel-y-Croythin	4½	5½	
1024	Exmoor Eliza (copper), South Molton	4½	3	
6000	Forest (copper and silver-lead), Devon	1½	1	
1024	Freidd Llwydd Mines (lead)	1½	3½	

Shares.		Paid.	Last Price.	Present Price.
12000	Galit-y-Maen (silver-lead), Merioneth	2	3	2½ 2½
2560	Garras (silver-lead), near Truro	5½	2½	
5000	Garreg (lead), Flint	—	1½	1½
1000	Gelli-rei-vin (silver-lead), Cardiganshire	1	5	
2500	Georgia Consols (tin), St. Ive's	2½	7	
256	Gonamena (copper), St. Cleer	46	12	
243	Grambler and St. Aubyn (copper)	84	34	
6500	Great Bryn Consols (copper and tin)	1	1	
2000	Great Cowarch (silver-lead), Merioneth	2	3	
1000	Great Polgooth (tin), St. Austell	3	3	
1024	Great Sheba Consols (tin and copper)	7	6 7 8	
1024	Great Wheal Alfred, St. Erth and Phillack	4	4	
5120	Great Wheal Baddern (tin and silver-lead)	2	5	
6000	Great Wheal Martha (cop.), Stoke Clims.	—	1½	
512	Great Wheal Rough Tor Consols (copper)	29	20	
6000	Growa Slate Company, Camelford	5	5	
1026	Gustavus Mines (copper), Camborne	6½	6	
512	Hawke's Point (copper), Uny Lelant	8½	3	
1024	Hawkmoor (cop.), Calstock, Gunnis Lake	7½	6	
6000	Helgnston Down Con. (copper), Calstock	2½	1½ 2	2 2½
32	Helvellin Mining Company, Westmoreland	20	30	
1500	Hennock (silver-lead), Hennock	2½	1½	
10000	Hibernian (copper) Ireland	12½	¼	
20000	Kenmare and West of Ireland (copper)	1	2	
1900	Keswick (lead), Portinscale, near Keswick	11	2	
3300	Kilbricken (silver-lead), Clare, Ireland	3	4½	
1024	Kingsett and Bedford (lead and copper)	4½	1	
786	Kirkcudbrightshire (lead), Kirkcud.	9½	4	
1024	La Min (Gwinear), tin and copper	3½	3 4	
1742	Lamberooe Wheal Maria (copper & tin)	13	12	
5000	Lampen Consols (copper), St. Neot	1	1	
252	Lanarth Consols (copper), Gwennap	4	5	
256	Lelant Consols (tin), Uny Lelant	60	22	
13000	Llwynmalees (lead), Cardiganshire	1	1	
3600	Llynvi Iron (iron)	50	50	
5056	Lydford Consols (lead)	—	1½	
6000	Marke Valley (copper), Caradon	10	3	
5000	Mendip Hills (lead), near Bristol	3½	2½	
5000	Merliyn (lead), Flint	2½	4	3 3½
1024	Mill Pool (tin and copper), St. Hilary	2	4	
256	Mineral Court (tin), near St. Austell	25½	30	
1024	Moditonham & Marrabro' (copper & lead)	2½	2½	
2000	Molland	1	1	
1024	Montgomery (lead and copper)	8	10	
160	Morvah Consols (tin and copper)	2	3	
320	Nansegollan (tin and copper), Camborne	7	8	
200	Nanteos (lead), Cardiganshire	34	30	
3000	Nant-y-Car (copper), near Rhayader	2	10	
5000	New Copper Bottom (copper) Bridestowe	1½	1½	
2048	New East Crowndale (copper and tin)	1½	¼	
1024	North Buller (copper), Redruth	6	13	
2000	North Downs (copper), Redrnth	¼	1½	
256	North Fowey Consols	—	25	12½
5000	North Levant (tin and copper), St. Just	1½	3	
2000	North Tamar (silver-lead & copper) Devon	2	2	2 2½
256	North Trefusis (tin and copper), Redruth	1	1	
1200	North Wh. Buller, or Gt. South Tolgus	5	14	
256	North Tolgus (copper), Redruth	11½	10	
262	North Wheal Leisure, Perranzabuloe	1½	1½	
1024	North Wh. Robert (copper), Walkhampton	2½	2	
2048	Okel Tor (lead)	¼	¼	
512	Old Brimpts (tin), Lydford, Ashburton	¼	5	
256	Old Wheal Basset (copper), Redruth	1	2½	
1026	Pendarves Consols (copper), Camborne	3½	6	
1000	Pendarves and St. Aubyn (tin and copper)	5	10	
406	Penhauger	1	3	
4934	Pennant and Craigwen (lead)	3	3½	
1000	Penralt	1	3	
2048	Pentire Glaze (silver-lead), St. Minver	5½	5½	
700	Pen-y-bank and Erglodd (lead)	4½	5	3
2048	Penzance Consols (tin), Sancreed	2½	1½	1
1000	Peter Tavy and Mary Tavy (copper)	3½	15	10
200	Phœnix (copper and tin), Linkinghorne	—	240	
2048	Plymouth Wh Yeoland Con. (tin), Plym.	1½	5	
1000	Polberro (tin), St. Agnes	15	15	
2000	Polgear (copper and tin)	1	3	
1024	Praed Consols (tin), Towednack	1½	17 18	
1024	Prince Albert (tin), Perranzabuloe	1	1	
2500	Rhoswydol and Bacheiddon (lead)	10½	6	
10000	Rhymney Iron (iron), Rhymney	50	12	
10000	Ditto New	7	3	
1948	Rix Hill (tin), Tavistock	1	1	
5000	Rocks and Treverbyn (tin), St. Austell	4½	4½	
2048	Runnaford Coombe (tin)	3	¼	
1024	Sidney Godolphin (copper), Breage	3½	3½	
2048	Snowdon (copper), Carnarvonshire	3	3	
2000	South of Scotland	1½	1	
2000	South Carn Brea (copper), Illogan	10	8	
256	South Friendship Wh. Ann (copper & tin)	30	28	
1024	South Plain Wood (copper), Ashburton	4½	6	
300	South Speed (copper and tin), Uny Lelant	15	30	
9000	South Tamar (silver-lead), Beer Ferris	1½	2½	2½ 2½
256	South Trelawny (lead), near Liskeard	33½	4	
2300	South Wales Mining Company (lead)	1½	2½	
256	South Wheal Josiah (copper), Calstock	2	2	
280	Spearne Moor (copper), St. Just	30	40	
1024	St. Aubyn and Gryils (copper and tin)	3	4½	

Shares.		Paid.	Last Price.	Present Price.
12000	St. Enoder (copper and lead) St. Enoder	1	1½	
999	St. Minver Consols (silver-lead)	1	4	
687	Tavy Consols (copper), near Tavistock	8½	1½	
5000	Temple Consols (tin & copper) Cornwall	2	5	
128	Tokenbury (copper), St. Ive, Liskeard	9½	12	
1200	Tolcarne (tin and copper), Camborne	2½	3	
1024	Trannack and Bosence, St. Erth	1	7	
1024	Trannack United Mines (tin and copper)	1½	7	4½ 5
1024	Trebarvah, Perranuthnoe	1	5	4½
2048	Trebell Consols (tin and copper), Lanivet	1½	2½ 2½	3½
600	Tregardock (lead), St. Teath	1½	5	
224	Tregorden (silver-lead) Wadebridge	15	20	15
1000	Treloweth (capper), St. Erth	5	6	
600	Trelyon Consols (tin), St. Ive's	4½	5 6	
1024	Tremar (copper), Liskeard	1½	¾ ¾	
2000	Trenance (copper), Helston	6	5	
6000	Trenault (lime quarries)	21s	21s	
512	Trethevy (copper), St. Cleer	10½	8 9 10	
512	Treville (lead), Lewanick	2½	7	
604	Trowan Consols (tin), Towednack	7	10	
100	Trumpet Consols (tin), near Helston,	95	100	
1000	Tyllwyd (lead), Cardiganshire	2	2½	
4000	Tyn-y-Worglod (slate), near Carnarvon	4	4	
500	Tywarnhayle (cop.), Illogan & St. Agnes	60	31½	27½
512	Tywardreath (copper), St. Blazey	2	12½	
1024	United Mines (copper and tin), Tavistock	11	10	
200	United Mines (copper), Gwennap	300	87½	
5000	Warleggan Consols (copper)	¾	¾	
1024	West Alfred Consols	8½	16½	
5000	West Basset (copper), Illogan	¼	¼	
1024	West Beam (tin), St. Austell	24s 6d	2½	
256	West Damsel (copper), Gwennap	5½	55 57½	
1024	West Ding-Dong (tin)	1	3½	
1024	West Downs (copper and tin), Whitchurch	2½	2	
512	West Fowey Con. (tin & cop.), St. Blazey	40	60	
2048	West Goginan (silver-lead), Cardiganshire	1½	3	
1020	West Nantymwyn	1	1	
1024	West Par Consols (copper), St. Blazey	10	11	
512	West Pentire (copper and lead), Padstow	½	¾	
1024	West Phœnix, Linkinghorne	5	5½	
6500	West Polgooth (tin), St. Ewe & St. Mewan	1	¾	¾
200	West Seton (copper), Camborne	67	115	
256	West Sharp Tor (copper) Linkinghorne	22	49	
3000	West Shepherd (silver-lead and copper)	2½	2	
940	West Tolgus (copper), Illogan	14½	4½	
120	West Trethellan (copper), Gwennap	15	20	
5000	West Wheal Alfred	1½	1½	1½
512	West Wheal Frances (copper), Illogan	8	14	
4000	West Wheal Friendship (copper)	1½	1	
3715	West Wheal Jewel (tin and copper)	12	1½	
3715	Ditto preference	½	¾	
2048	West Wheal Rose	2	2	
4000	West Wheal Russell, Tavistock	¼	1	¾
500	West Wheal Towan (copper), Illogan	15	14	
1024	West Wheal Treasury (copper), Gwinear	8	5	
1024	West Wheal Virgin (tin), Sancreed	2	1½	
1024	Weston (lead), Cherbury, Shropshire	1½	¾	
1070	Wheal Adams (lead), Christow, Exeter	13½	16	
1000	Wheal Agar (copper), Illogan	6	5	
300	Wheal Arthur (lead), near East Wh. Rose	17	49	
1228	Wheal Arthur (silver-lead&cop.), Calstock	1½	3	
3072	Wheal Augusta (tin), St. Just	1	1½	
240	Wheal Bal (tin), St. Just	5½	16	
5000	Wheal Caradon (copper), St. Cleer	1	1	
256	Wheal Carpenter (tin), Gwinear	1½	5	
1024	Wh. Carpenter (lead & cop.) S. Sydenham	2	3	
124	Wh. Castle and Boswedden (tin & copper)	5	20	
1024	Wheal Catherine (silver-lead), Liskeard	2½	2½	
1024	Wheal Chiverton (copper)	1	1	
1024	Wheal Crebor (copper), Tavistock	3	4½ 5	4½
1024	Wheal Cupid (copper), Gwennap	1	2½	
3000	Wheal Dora (tin and copper), St. Cleer	3½	6½	
4096	Wheal Edward (copper), Calstock	¼	1½	
182	Wheal Elizabeth (copper), Redruth	23	6	
1024	Wheal Emily (antimony and lead)	3	5	
182	Wheal Ennis (lead), St. Erme	17	20	
1070	Wheal Enys (tin), Wendron	1½	1½	
5000	Wheal Fanny (lead)	—	3	
916	Wheal Fortescue (copper), Tavistock	5½	1½	
764	Wheal Franco (copper), near Tavistock	14½	11	
100	Wheal Friendly (tin), St. Agnes	70	31	
1536	Wheal Gill (cop. and lead), Liskeard	3	—	
1000	Wheal Guskis (tin and copper), St. Hillary	½	1	
2048	Wheal Hamlyn, near Oakhampton	1	1	
2560	Wheal Harriet (copper), Camborne	1	¾	¾ ¾
2048	Wheal Harris (lead), near Tavistock	¼	1	
216	Wheal Henry (copper), Kea, near Truro	25	8	
6000	Wheal Langford (copper and silver-lead)	¼	2	2
2000	Wheal Langmaid (lead)	¼	1	
1000	Wheal Lemon, Germoe	13s	¾	
1024	Wheal May (silver-lead and copper	2½	2½	
990	Wheal Mary (copper), Redruth	16½	5	
1024	Wheal Mary Ann (copper), Bridestow	—	2	
1024	Wheal Mary Emma, Tavistock	1½	2½	
1024	Wheal Neptune (copper), Perranuthnoe	2	3	
1080	Wheal Oak, near Helston	1½	1½	
3000	Wheal Penhale (lead and copper)	2½	4½	
128	Wheal Plenty (copper), Redruth	29	38	
128	Wheal Pollard (copper), St. Cleer	15½	10	
210	Wheal Prospect	4	6	
5000	Wheal Providence, South Sydenham	¼	3	
256	Wheal Prudence (copper), St. Agnes	2½	4	
2048	Wheal Robins	¼	1½	
4000	Wheal Russell (copper), Tavistock	1½	1½	
5000	Wheal Ruth (tin), Shepstor	2	2	
512	Wheal Sophia (silver-lead), Lezant	7	7	
1024	Wheal Speedwell (copper and tin)	2	2	
1024	Wheal Squire (copper), St. Erth	1½	1½	
256	Wheal St. Agnes (tin), St. Agnes	1½	2	
1024	Wheal Stanagwyn (copper), St. Stephen's	1	3	
1000	Wheal Susan, Breage and Crowan	1½	2	
1024	Wheal Sydney, Plympton	1½	4	
2000	Wheal Tom (tin & copper), Stoke Clims.	5	11½	
512	Wheal Trefusis (copper), Gwennap	8½	14	13½
1024	Wheal Trelusback (copper), Stythians	5	4	
256	Wheal Tremaine (copper), St. Ervan	11	1 1½	
3300	Wheal Trescoll (tin), Lanivet, Bodmin	3	1½	
4224	Wheal Trewane (silver-lead), St. Kew	1½	5	
267	Wheal Tryphena (tin and copper)	40	18½	
126	Wheal Union (copper), Redruth	40	40	
6000	Wh. Unity Consols (cop. & tin), Gwinear	2	2½	
1024	Wheal Uny (tin and copper)	3	5	
1024	Wheal Venton (silver-lead), Liskeard	4½	7 7½	7½ 8 7½
4000	Wheal Victoria (copper)	—	2½	
1000	Wheal Vincent (tin), Alternum	7½	7½	
512	Wheal Violet (tin and cop.), St. Stephens	1½	3½	3½
256	Wheal Vlow	2	4	
4000	Wheal Williams (copper)	—	2½	
1024	Wheal Wrey (lead), St. Ive, Liskeard	2s 6d	2	
4096	Wheal Zion (copper and lead), Tavistock	1½	8 10	6½

Shares.	FOREIGN MINES.	Paid.	Present Price
12000	Annotto Bay Mining Association (copper), Jamaica	1	5½ 6
19000	Australian (copper), South Australia	5	1 1½
3250	Kinzigthal Mining Association (silver), Germany	2½	
12000	Liguanea and General Mining Company of Jamaica	1	3
5000	Linares (lead), Spain	3	1 1½
500	Ditto Preference	3	3
4500	Ditto Additional	1	1½
20000	Mexican and South American (copper), Mexico	4½	4½
5000	National Brazilian (gold), Brazil	30	2½ 2½
104000	North British Australasian (copper), S. A. & New Zea.	1	¼
10000	Worthing (copper), Adelaide, South Australia	4	4 5 6½

IRON CASES.—There is now lying for inspection on the staircase of the Underwriters' Rooms an iron cask; the staves, hoops, heading, &c.,